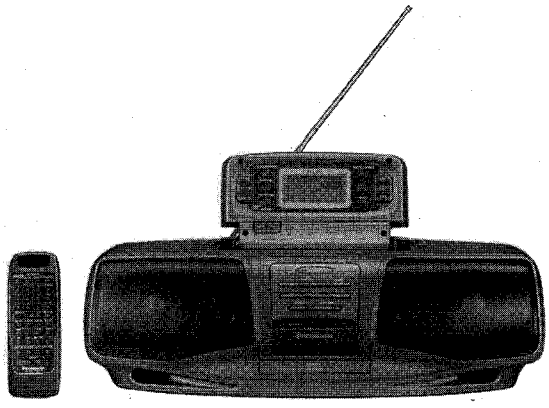
ORDER NO. AD9412362C2

Service Manual

Portable Stereo CD System

Radio Cassette

RX-DT07



COMPACT disc DIGITAL AUDIO

MASH* multi-stage noise shaping

Colour

(K) : Black

Areas

Suffix for Model No.	Area	Colour
(EB)	Britain	(K)
(EG)	Europe and Germany	

Tape Deck: AR300 Mechanism Series
Traverse Deck: RAE0113Z Mechanism Series

■ Specifications

General:

Power Requirement:	AC; 230 – 240 V, 50 Hz
Battery	15 V (Ten UM-1, R20 / LR20 batteries)
Memory Back-up for Computer / Clock	6 V (Four UM-3, R6 / LR6 batteries)
Power Consumption:	46 W (AC only)
Power Output:	60 W (PMPO)
Speakers:	
Woofer	10 cm PM Dynamic speaker, 2.7Ω
Tweeter	1.4 cm Ceramic speaker
Input:	
MIX MIC	2 mV, 200-600Ω, Ø3.5
AUX	400 mV, 47 kΩ, Ø3.5
Output:	PHONES; 32Ω, Ø3.5
Dimensions:	565 (W) × 188 (H) × 291 (D) mm (Top panel closed)
Weight:	6.4 kg without batteries

CD Player:

Sampling Frequency:	44.1 kHz
Decoding:	16-bit linear
Beam Source:	Semiconductor laser (wavelength 780 nm)
No. of Channels:	2 channels, stereo
Wow and Flutter:	Less than possible measurement data
D/A Converter:	MASH (1 bit DAC)

Radio :

Frequency Range:	
LW	144 – 288 kHz (9 kHz steps)
MW	522 – 1611 kHz (9 kHz steps)
FM	87.5 – 108.0 MHz (50 kHz steps)
Intermediate Frequency:	
FM	10.7 MHz
LW/MW	459 kHz
Sensitivity:	
LW	100 μV/m/ 0.5 mW H.P. output (Max.)
MW	126 μV/m/ 0.5 mW H.P. output (Max.)
FM	3.5 μV/ 0.5 mW H.P. output (-3 dB Limit Sens.)

Tape Recorder :

Frequency Range:	
Normal	30 – 16,000 Hz
CrO_2	30 – 17,000 Hz
Recording System:	AC bias, AC erase
Tape Speed:	4.8 cm/s
Monitor System:	Variable sound monitor
Track System:	4-track, 2-channel, stereo recording and playback

***MASH is a trademark of NTT.**

Notes:

1. Weight and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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CAUTION:
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ Precaution of Laser Diode

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.
Wave length: 780 nm
Maximum output radiation power from pick up: 100 μW/VDE

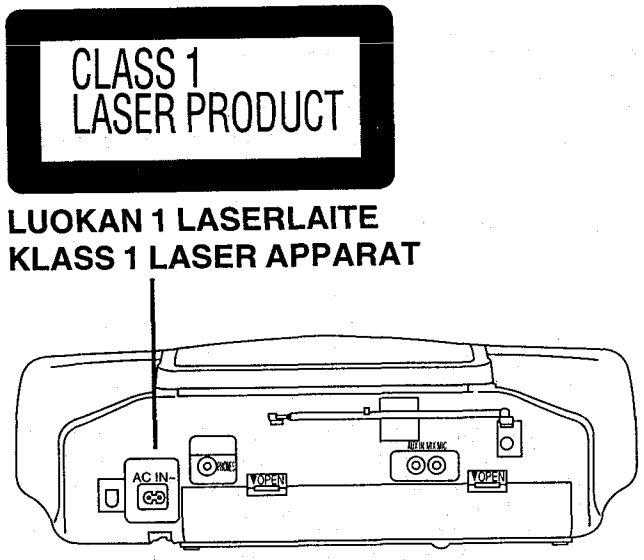
Laser radiation from the pick up unit is safety level, but be sure the followings:

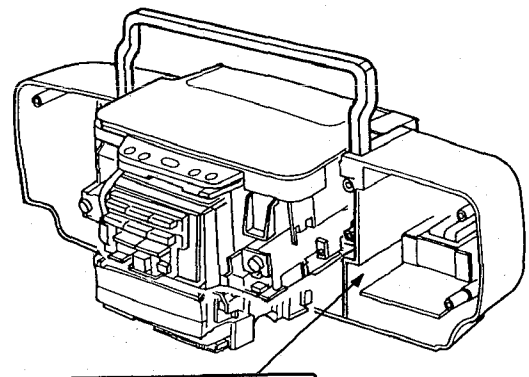
1. Do not disassemble the pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick up unit. It was already adjusted.
3. Do not lock at the focus lens using optical instruments.
4. Recommend not to lock at pick up lens for a long time.

ACHTUNG: Dieses produkt enthält eine laserdiode. Im eingeschalteten zustand wird unsichtbare laserstrahlung von der lasereinheit adgestrahit.
Wellenlänge: 780 nm
Maximale strahlungsleistung der laserinhelt: 100 μW/VDE

Die strahlung an der lasereinheit ist ungefährlich, wenn folgende punkte beachtet werden:

1. Die lasereinheit nicht zerlegen, da die strahlung an der freigelegten laserdiode gefährlich ist.
2. Den werksseitig justierten einstellregler der lasereinreit nicht verstellen.
3. Nicht mit optischen instrumenten in die fokussierlinse blicken.
4. Nicht über längere zeit in die fokussierlinse blicken.





DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

■ Caution for AC Mains Lead [for (EB) area]

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

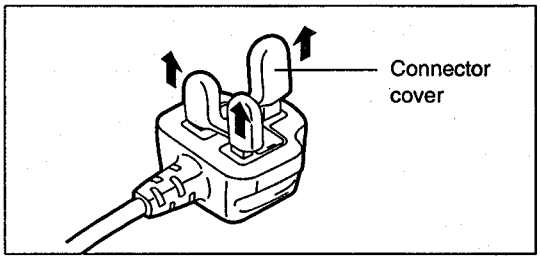
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚.

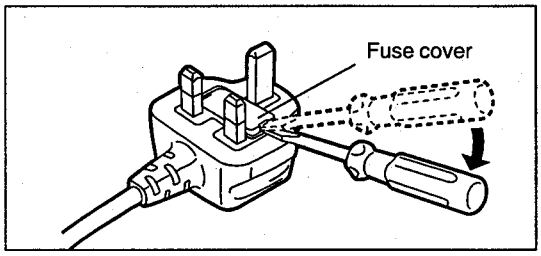
Before use

Remove the connector cover as follows.

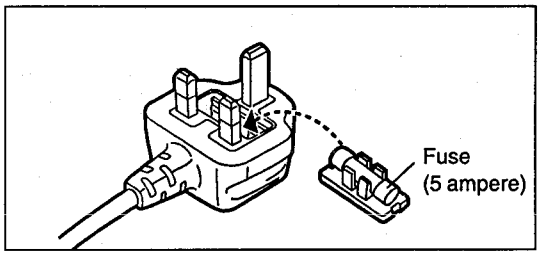


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



■ Location of Controls

Common operations

① **Top panel open, close buttons (TOP PANEL OPEN, CLOSE)**

② **Power "STANDBY ⏻ (AC)/ON" switch [POWER, STANDBY ⏻ (AC)/ON]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

③ **Volume buttons (VOLUME +, −)**

④ **Display section**

⑤ **Memory button (MEMORY)**

⑥ **Select buttons (TIME SET/TUNING/CD +, −)**

⑦ **Clock check/adjust button (•CLOCK CHECK/▬ ADJUST)**

⑧ **Timer check/adjust button (•TIMER CHECK/▬ ADJUST)**

⑨ **Timer button (TIMER) (•PLAY ••REC)**

⑩ **Preset equalizer button (PRESET EQ)**

⑪ **Auxiliary input button (AUX)**

⑫ **Remote control signal sensor (SENSOR)**

⑬ **Power/battery check/standby indicator (POWER/BATT, STANDBY⏻)**
The indicator lights green when the unit is turned on. When the AC power supply is used, it functions as an AC connection indicator. (The indicator colour changes to red when the unit is turned off.)
When the unit is operated on batteries, it functions as a battery check indicator.

⑭ **Surround button (SURROUND)**

Tuner section A

⑮ **Preset tuning buttons (CD/PRESET TUNING ⏮/∨, ⏭/∧)**

⑯ **Tuning buttons (TIME SET/TUNING/CD, +, −)**

⑰ **Memory button (MEMORY)**

⑱ **Band select button (BAND)**

CD section B

⑲ **Easy CD record button (EASY CD REC)**

⑳ **Skip/search buttons (CD/PRESET TUNING ⏮/∨, ⏭/∧)**

㉑ **Program button (MEMORY)**

㉒ **Select buttons (TIME SET/TUNING/CD, +, −)**

㉓ **Play/pause button (▷/⏸)**

㉔ **Stop/clear button (□/CLEAR)**

㉕ **CD tray open/close button (⏏)**

㉖ **CD tray**

Cassette deck section

㉗ **Deck 1/deck 2 select button (DECK 1/2)**

㉘ **Rewind/TPS button (REW TPS)**

㉙ **Fast forward/TPS button (FF TPS)**

㉚ **Recording/rec pause button (REC/REC PAUSE)**

㉛ **Tape edit button (TAPE EDIT) (•NORMAL ••HIGH)**

㉜ **Deck 1 cassette lid open lever (▲ EJECT)**

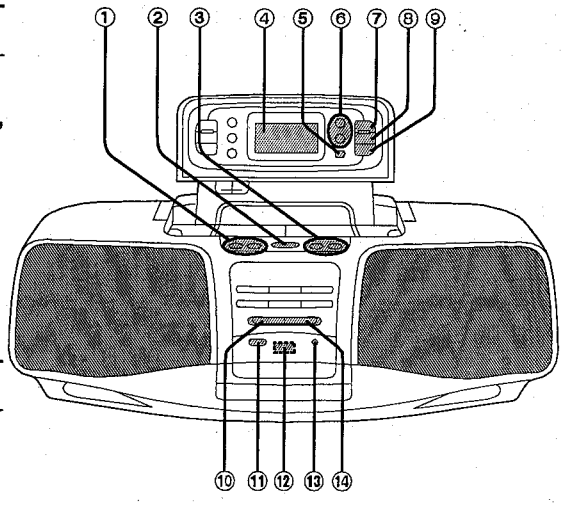
㉝ **Deck 1 (Playback)**

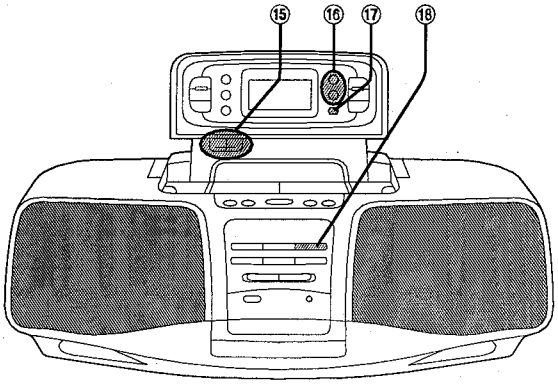
㉞ **Playback/direction button (◁ ▷)**

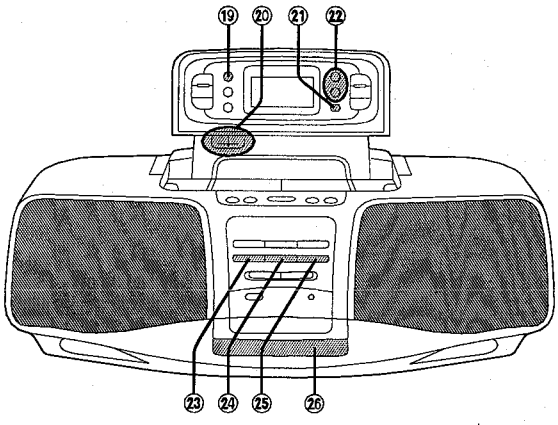
㉟ **Stop button (□)**

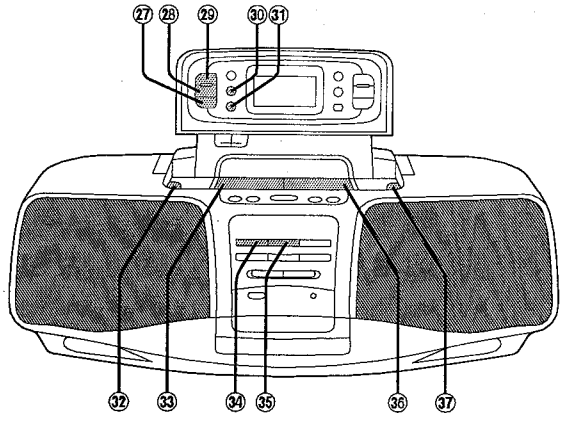
㊱ **Deck 2 (Playback/Recording)**

㊲ **Deck 2 cassette lid open lever (▲ EJECT)**









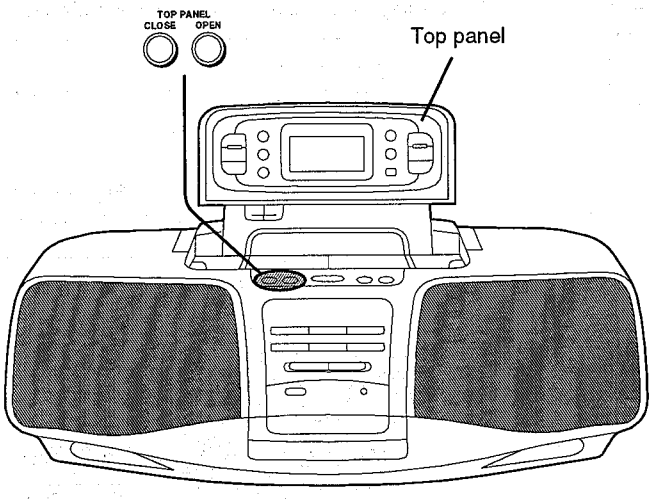
■ Common Operations

Opening the top panel

Press TOP PANEL OPEN to open the panel.

Press TOP PANEL CLOSE to close the panel.

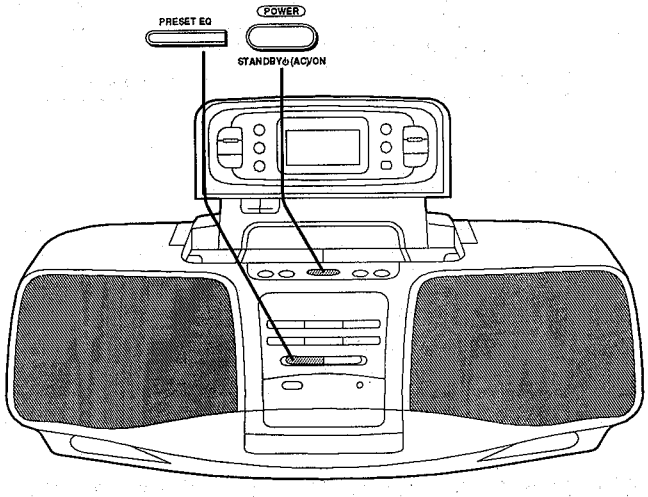
When this unit is operated on battery power, the panel cannot be opened or closed by pressing OPEN or CLOSE on the remote control in the unit off mode. Turn the unit on first by pressing POWER on the main unit before opening or closing the panel.



Beep tone

When one of the function buttons is pressed, one beep is heard to verify that the button has been properly operated. When one of the buttons has been pressed in error, two beeps are heard as a warning.

If you prefer not to have the beep tone function:
(Main unit only)
In the unit-off mode, press POWER while holding PRESET EQ down.
The "BEEP" display appears first followed by "OFF".
To resume the beep, repeat the same operation in the unit-off mode.
(The "BEEP" display appears first followed by "ON".)



■ Setting the Clock

The clock has a 24-hour display.

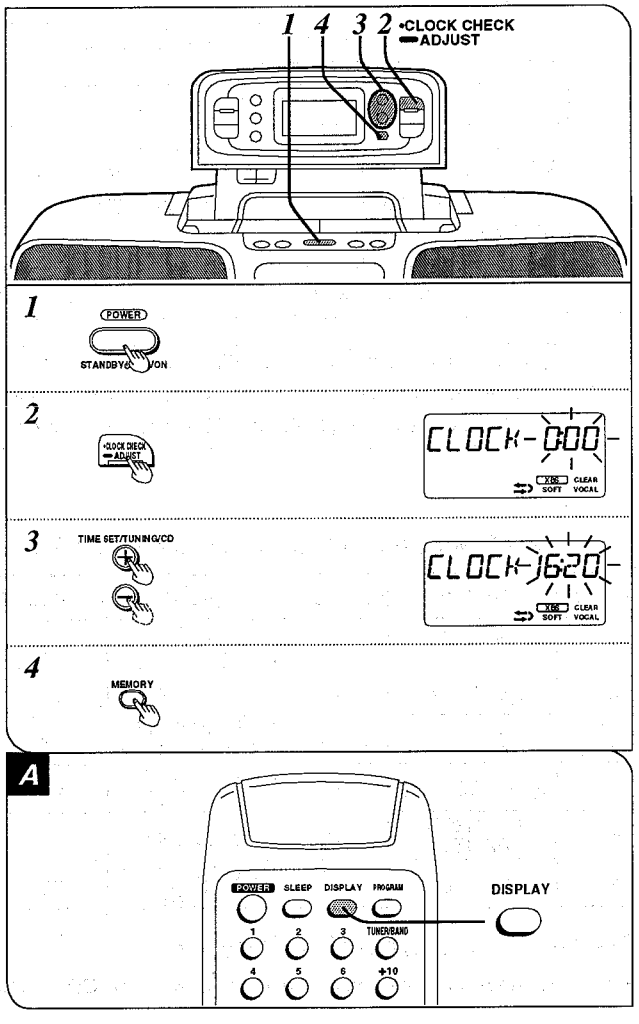
Example:
Setting the clock to 16:20;

1 **Press POWER.**
(This turns the unit on.)

2 **Press • CLOCK CHECK / ▬ ADJUST and hold until the time display starts flashing.**

3 **While the time display is flashing;**
Press + or - to show desired time.

4 **Press MEMORY.**
(The clock now starts operating, and the display returns to its original status.)



To display the clock (when the unit is on):
Press • CLOCK CHECK / ▬ ADJUST.

Selecting the Display A

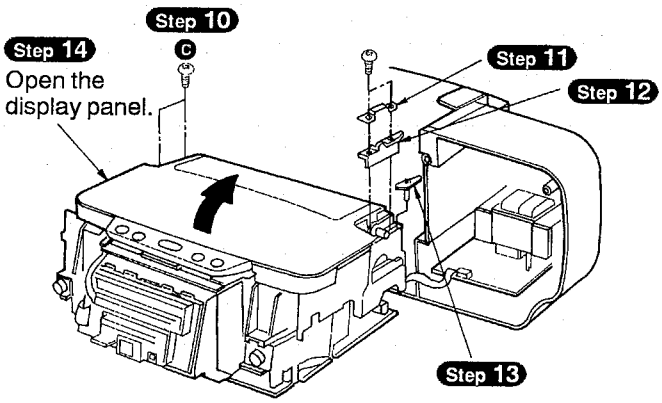
(Available only from the remote control)

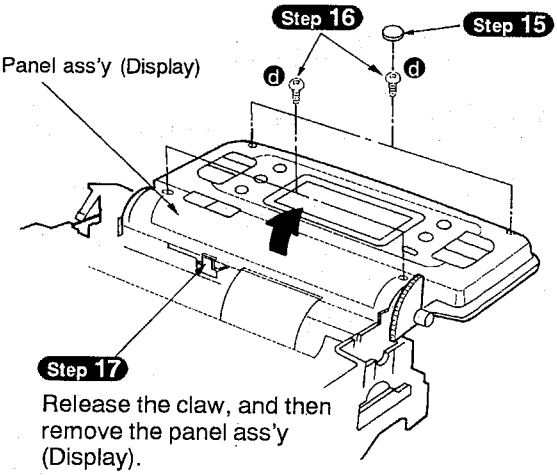
This operation comes in handy to check the present time during play or the tape counter display during recording.

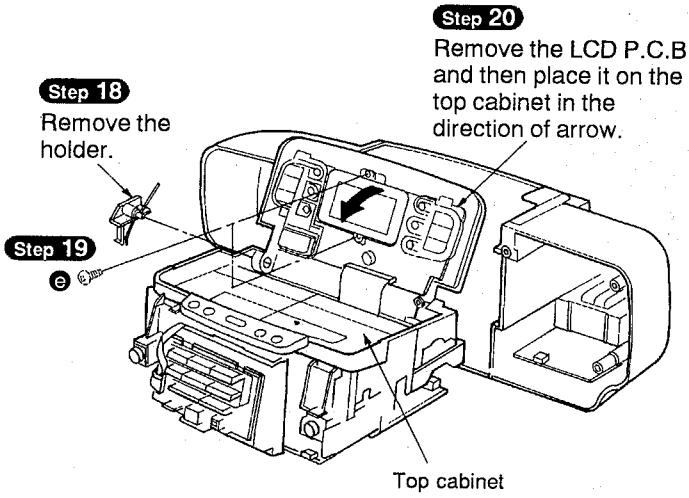
Press DISPLAY.
→ Play status → Present time → Tape counter

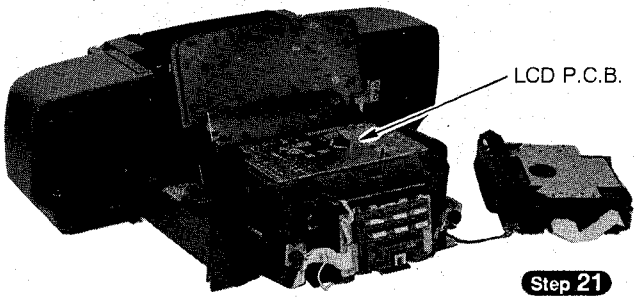
(The display changes each time the button is pressed.)

"----" appears on the tape counter display when a tape has not been loaded.





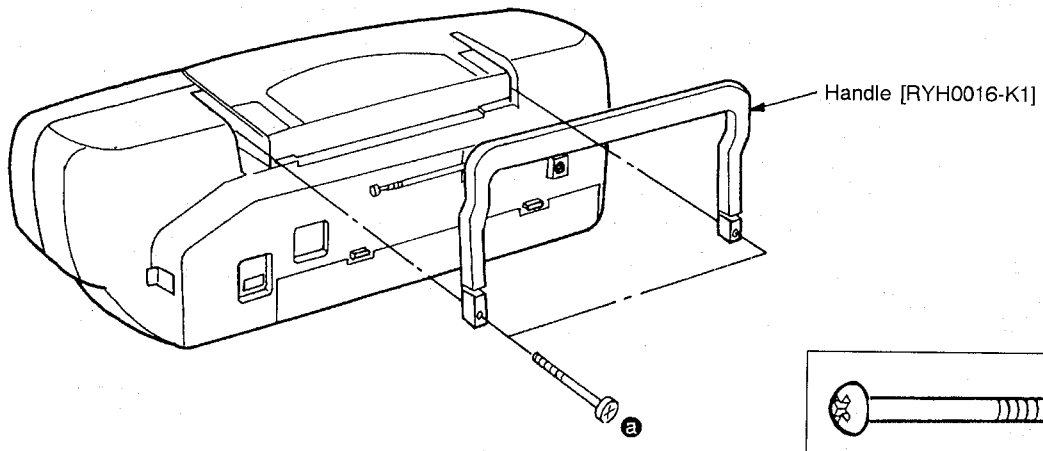

Step 20
Remove the LCD P.C.B., and then place it on the top cabinet in the direction of arrow.
Step 18
Remove the holder.
Step 19
Top cabinet

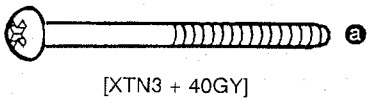


• Check the LCD P.C.B. in this condition.

■ Main Component Replacement Procedures

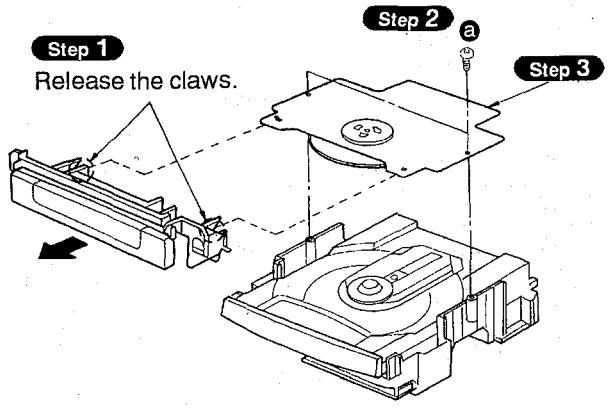
1. Replacement for the handle

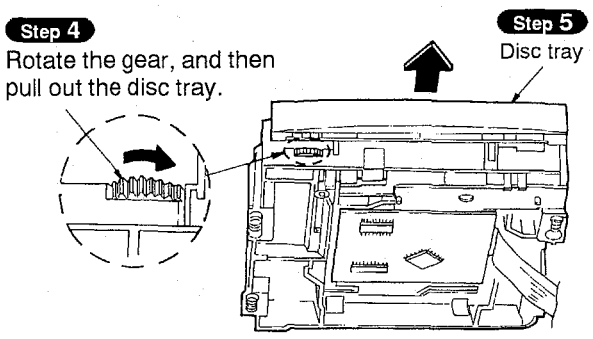




2. Replacement for the traverse deck

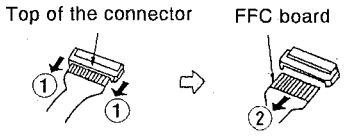
- Follow the item 1 (**Step 1** ~ **Step 7**) in checking procedures for each P.C.B. on page 8.

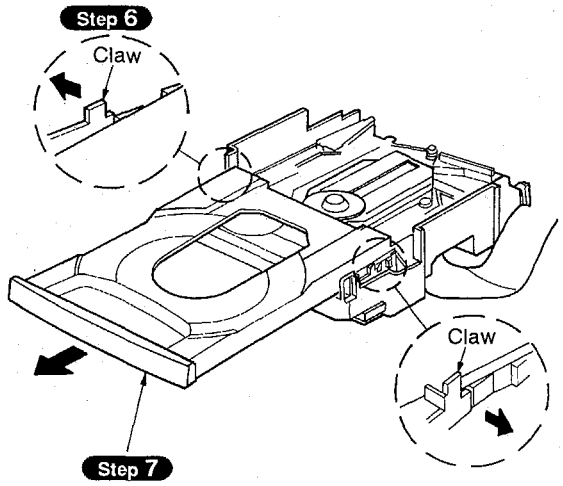


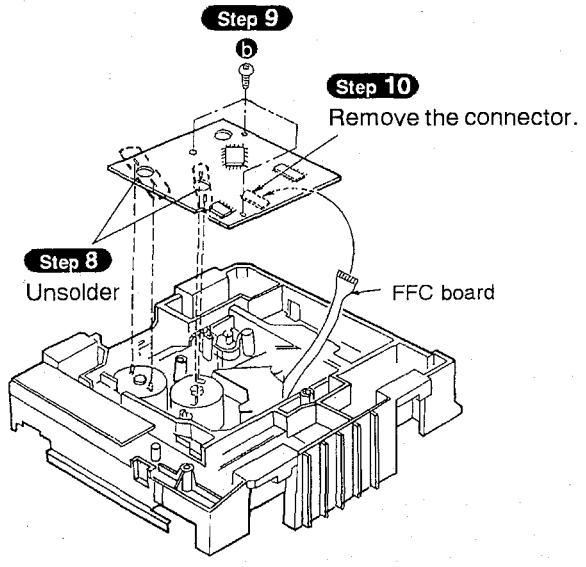


Removal of the connector

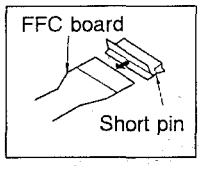
Slide the top of the connector in the direction of arrow ① and disconnect the FFC board in the direction of the arrow ②.

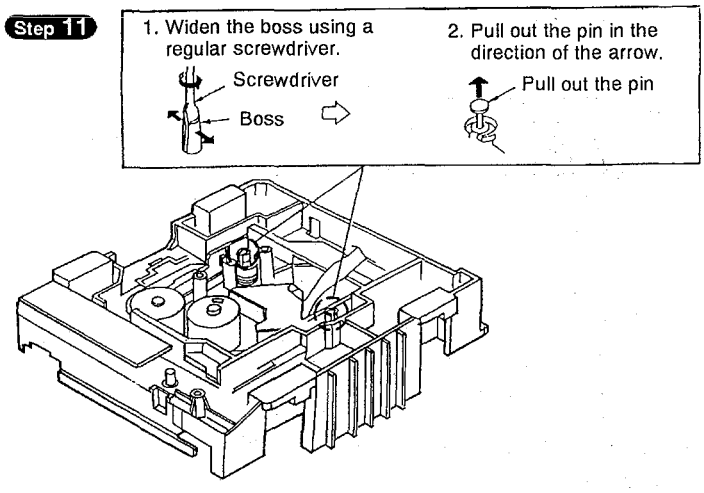


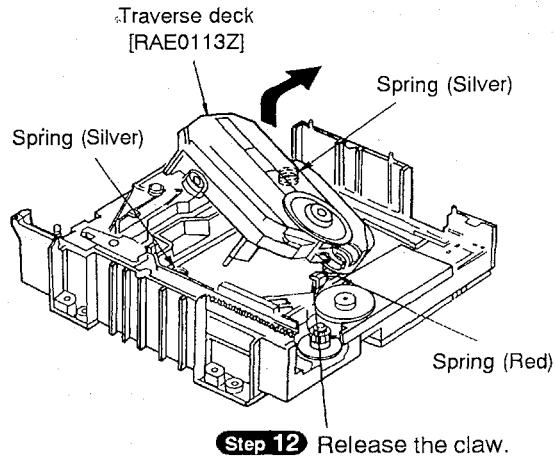




Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to "Handling Precautions fro Traverse Deck" on page 7.)




Step 11
1. Widen the boss using a regular screwdriver.
Screwdriver
Boss
2. Pull out the pin in the direction of the arrow.
Pull out the pin

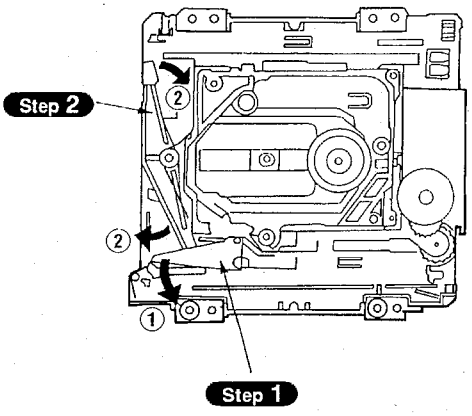


a [XTN26 + 6G]

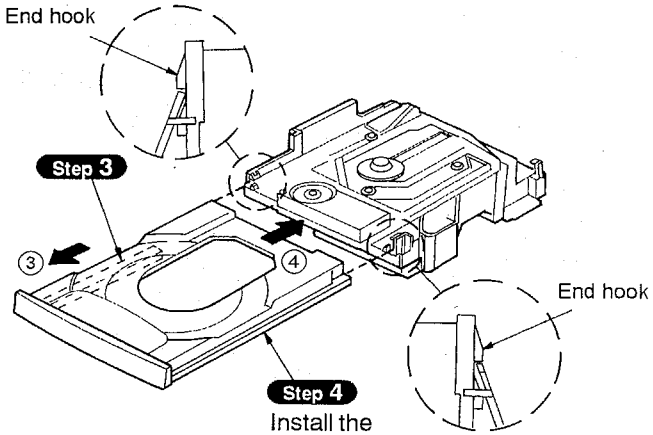
b [XTV2 + 6G]

NOTE
Be careful not to lose the 3 springs because those will also be removed on removal of the traverse unit ass'y.

Installation of the disc tray after replacement



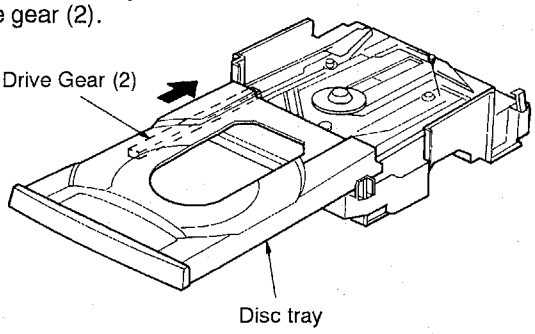
- Push the disc tray in the direction of arrow until the end hooks are latched.

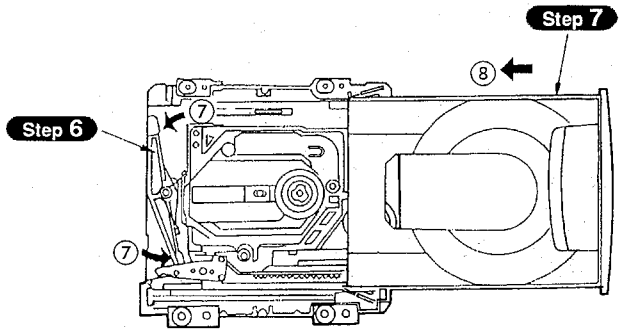


Install the disc tray.

Step 5

Hold the disc tray and slide the drive gear (2).

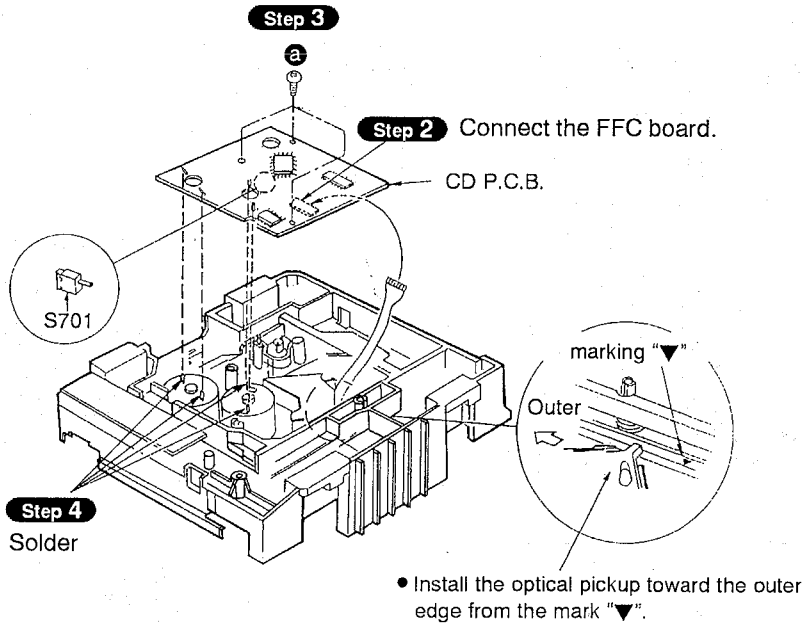




Installation of the CD P.C.B. after replacement

Step 1 Install the CD P.C.B. in the traverse deck ass'y.

Before installing the CD P.C.B., move the optical pickup toward the outer edge from the mark "▼". [Otherwise, the rest detect switch (S701) mounted on the CD P.C.B. may be damaged.]

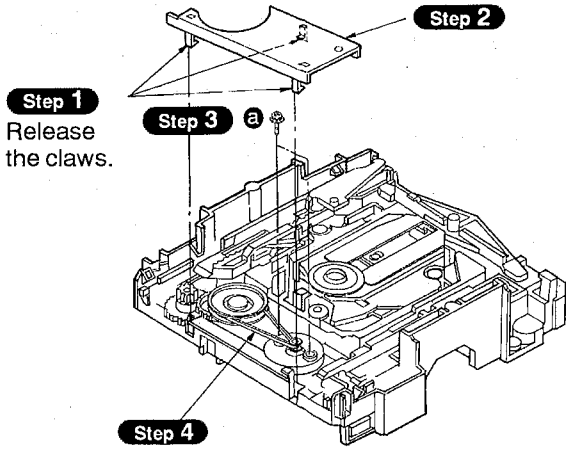


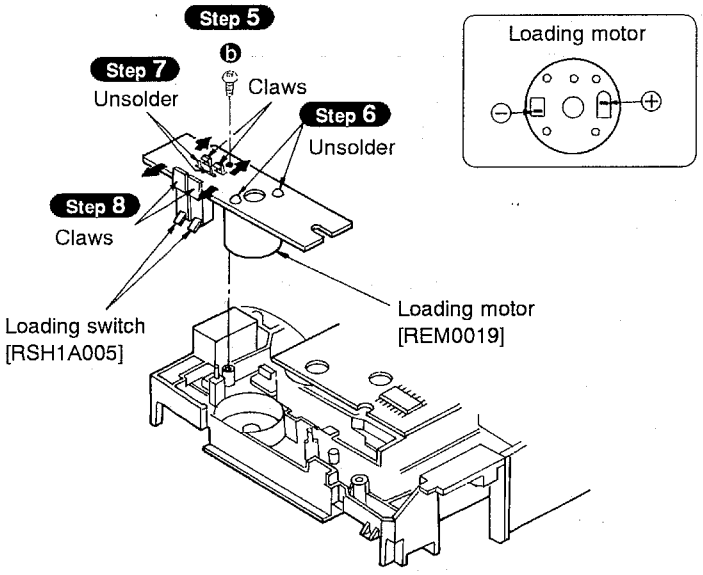
- Install the optical pickup toward the outer edge from the mark "▼".

[XTV2 + 6G]

3. Replacement for the belt, loading motor and loading switch

- Follow the item 1 (Step 1 ~ Step 7) in checking procedures for each P.C.B. on page 8.
- Follow the item 2 (Step 1 ~ Step 7) in main component procedures on page 13.



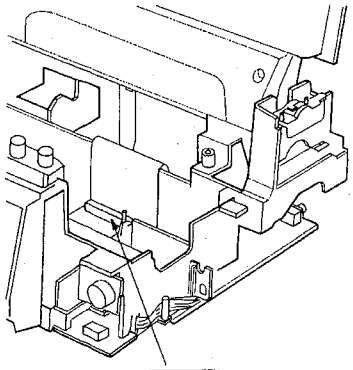


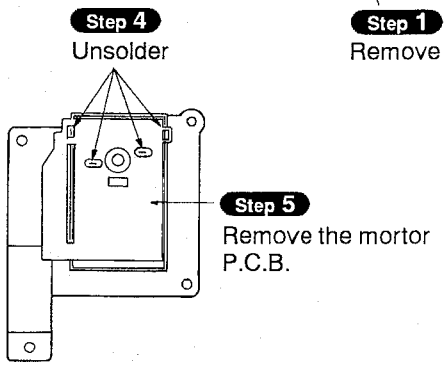
a [XYN2 + F6FZ]

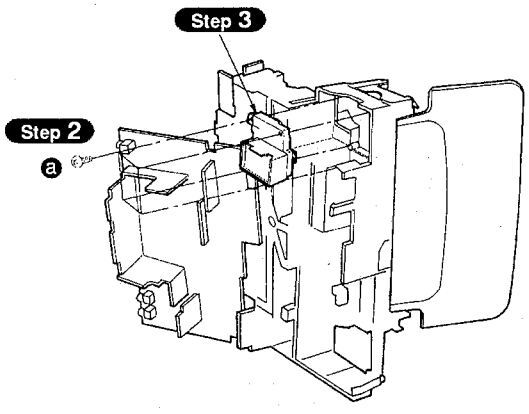
b [XTN26 + 6G]

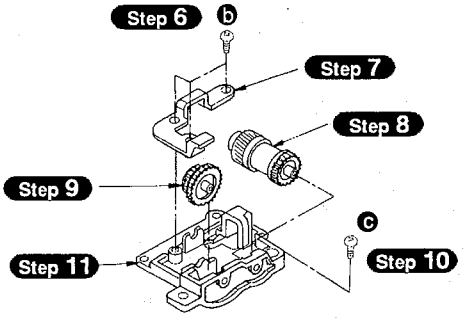
4. Replacement for the motor ass'y

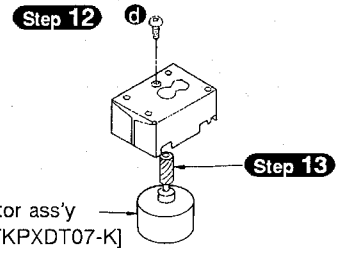
- Follow the item 3 (Step 1 ~ Step 16) in checking procedures for each P.C.B. on pages 10 and 11.











a [XTV3 + 12G]

b [XTV26 + 12F]

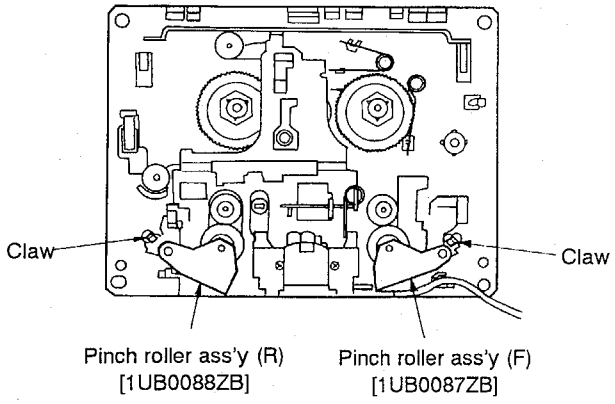
c [XQN2 + C6]

d [XQN2 + C3]

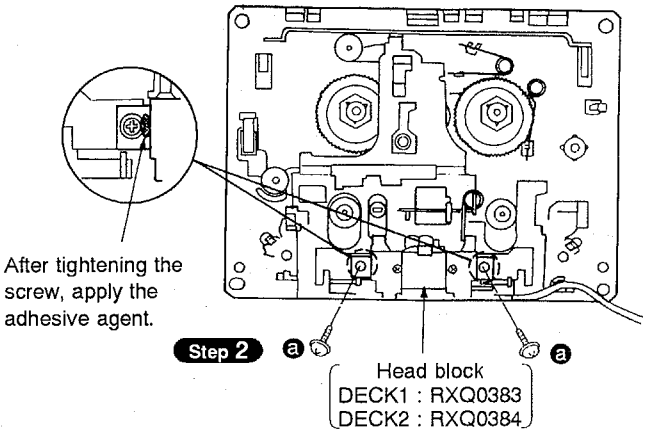
5. Replacement for the pinch roller ass'y and head block

- Follow the item 2 (**Step 1** ~ **Step 13**) in checking procedures for each P.C.B. on page 9.

Step 1 Release the claws, and then remove the pinch roller ass'y.



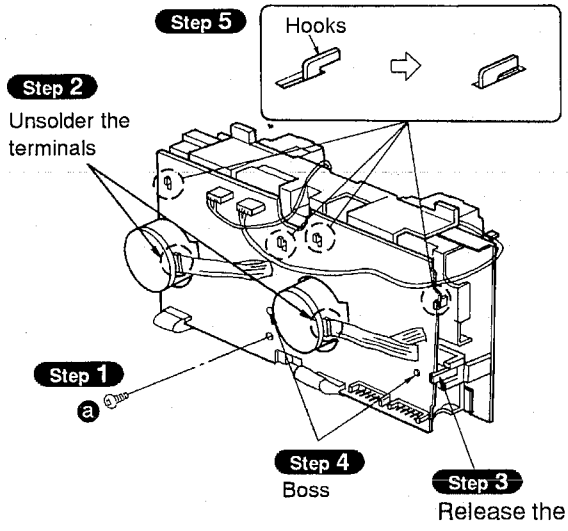
- The below illustration shows DECK 1 mechanism. For DECK 2 mechanism, disassemble the same as DECK 1 mechanism.

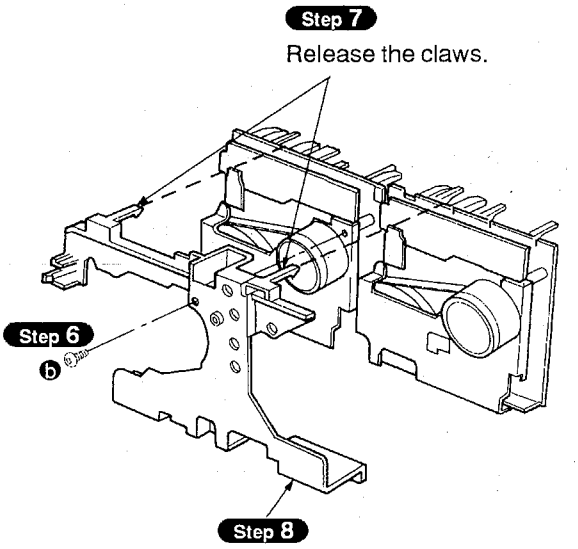


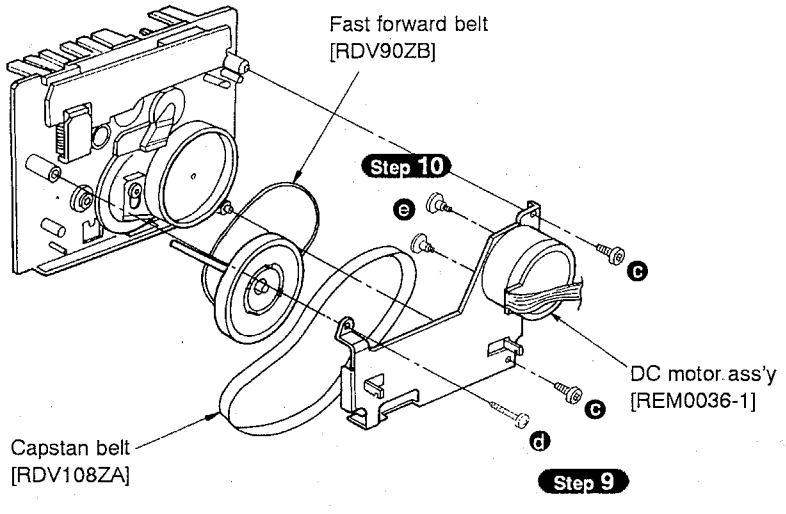
ⓐ [XTW2 + 6L]

6. Replacement for the DC motor ass'y, capstan belt and fast forward belt

- Follow the item 2 (**Step 1** ~ **Step 13**) in checking procedures for each P.C.B. on page 9.







ⓐ [XTV3 + 12G]

ⓐ [XTV26 + 10G]

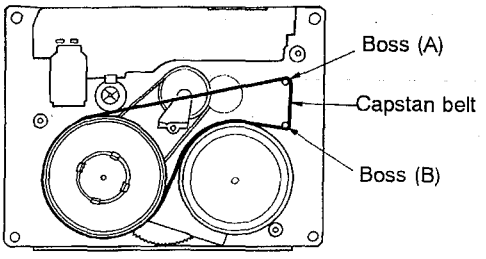
ⓒ [XTN26 + 7J]

ⓓ [RHE5203ZA]

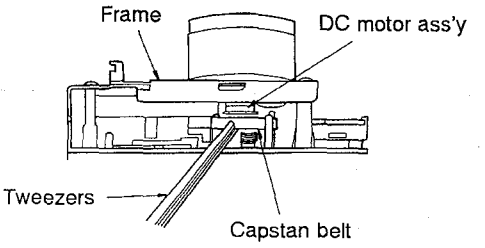
ⓔ [RHD26002]

Installation of the capstan belt after replacement

Step 1 Temporarily secure the belt as shown below.



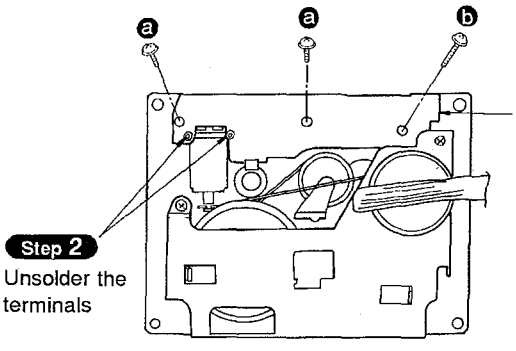
Step 2 Secure the belt with the capstan motor pulley.



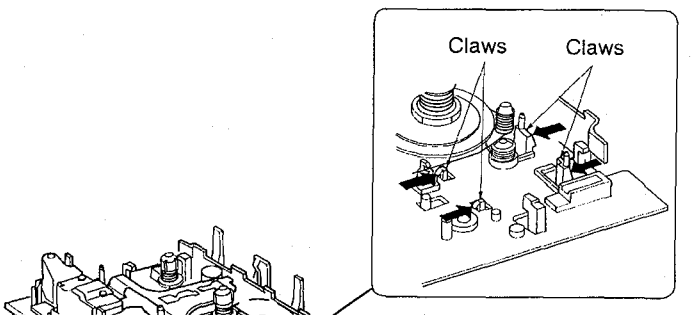
7. Replacement for the plunger ass'y and the parts mounted on mechanism P.C.B.

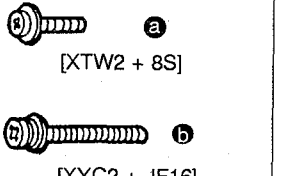
- Follow the item 2 (**Step 1** ~ **Step 13**) in checking procedures for each P.C.B. on page 9.
- Follow the item 6 (**Step 1** ~ **Step 3**) in main component procedures on page 16.

Step 1



Step 3

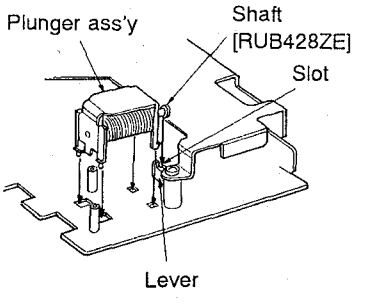




NOTE

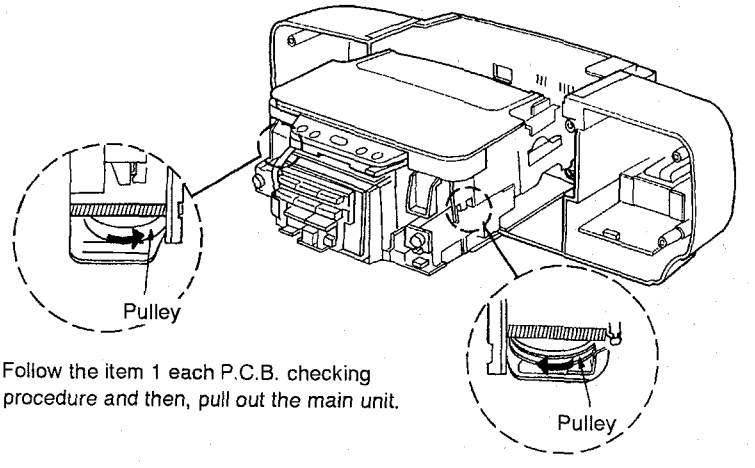
Notice for installing the plunger ass'y

- The shaft of plunger ass'y be aligned with the slot of lever.



■ Measure for tape trouble

If a cassette tape cannot be removed from the deck since the tape is caught by the capstan or pinch roller during playback or recording, rotate the pulley in the direction of the arrow to remove the tape.



- Follow the item 1 each P.C.B. checking procedure and then, pull out the main unit.

■ Schematic Diagram

		Page
A	CD circuit	19, 20
B	Tuner circuit	21, 22
C	Mechanism control circuit	23~25
D	Mechanism circuit (DECK2)	25
E	Mechanism circuit (DECK1)	25
F	LCD circuit	26, 27
G	Connector circuit	28
H	Motor circuit	28
I	Operation (1) circuit	28
J	Operation (2) circuit	28
K	Main circuit	28~32
L	Loading motor circuit	32
M	Connector (2) circuit	32
N	Connector (3) circuit	32
O	Tweeter (L) circuit	32
P	Tweeter (R) circuit	32
Q	Power supply circuit	32
R	LED circuit	32

< CD circuit >

•S701 : Rest switch.

< Mechanism control circuit >

•VR301 : DECK2 tape speed adjustment VR. (High speed)
•VR302 : DECK2 tape speed adjustment VR. (Normal speed)
•VR303 : DECK1 tape speed adjustment VR. (Normal speed)

< Mechanism circuit DECK2 >

•S971 : Mode detect switch.
•S972 : Cassette tape insertion detect switch.
•S973 : Reverse side record prevention tab detect switch.
•S974 : Forward side record prevention tab detect switch.
•S975 : CrO_2 tape detect switch.

< Mechanism circuit DECK1 >

•S951 : Mode detect switch.
•S952 : Cassette tape insertion detect switch.
•S953 : CrO_2 tape detect switch.

< LCD circuit >

•S790 : Disc tray close detect switch.
•S791 : Disc tray open detect switch.
•S801 : Clock check / adjust switch. (CLOCK CHECK / ADJUST)
•S802 : Timer check / adjust switch. (TIMER CHECK / ADJUST)
•S803 : Timer switch. (TIMER)
•S804 : Memory switch. (MEMORY)
•S805 : Select switch. (TIME SET / TUNING / CD –)
•S806 : Select switch. (TIME SET / TUNING / CD +)
•S807 : Easy CD record switch. (EASY CD REC)
•S808 : Tape edit switch. (TAPE EDIT)
•S809 : Recording / rec pause switch. (REC / REC PAUSE)
•S810 : DECK1 / DECK2 select switch. (DECK1/2)
•S811 : Fast forward / TPS switch. (FF TPS)
•S812 : Rewind / TPS switch. (REW TPS)
•S813 : Preset tuning / skip / search switch. (⏮ / ∨)
•S814 : Preset tuning / skip / search switch. (⏭ / ∧)

< Operation (1) (2) circuit >

•S1001 : CD tray open / close switch. (⏏)
•S1002 : Top panel close switch. (CLOSE)
•S1003 : Top panel open switch. (OPEN)
•S1004 : Power switch. (POWER, STANDBY ⏻ (AC) / ON)
•S1005 : Volume switch. (VOLUME –)
•S1006 : Volume switch. (VOLUME +)
•S1007 : Playback / direction switch. (◀ ▶)
•S1008 : Stop switch. (■)
•S1009 : Band select switch. (BAND)
•S1010 : Stop / clear switch. (■ / CLEAR)
•S1011 : Play / pause switch. (▶ / ❚❚)
•S1012 : Preset equalizer switch. (PRESET EQ)
•S1013 : Surround switch. (SURROUND)
•S1014 : Auxiliary input switch. (AUX)

< Power supply circuit >

•S901 : AC / DC select switch in "DC" position.

• Battery current:

Vol. min...	200 mA (FM)	Vol. max...	1300 mA (FM)
	190 mA (MW/LW)		930 mA (MW/LW)
	260 mA (TAPE)		1600 mA (TAPE)
	380 mA (CD)		1840 mA (CD)

Measurement instruction

MW/LW:	74 dB/m, 30% Mod.
FM:	60 dB, 30% Mod.
TAPE:	315 Hz, 0 dB
CD:	1 kHz, 0 dB

• DC voltage measurements are taken with electronics voltmeter. The negative terminal of the battery provides negative meter connection point.

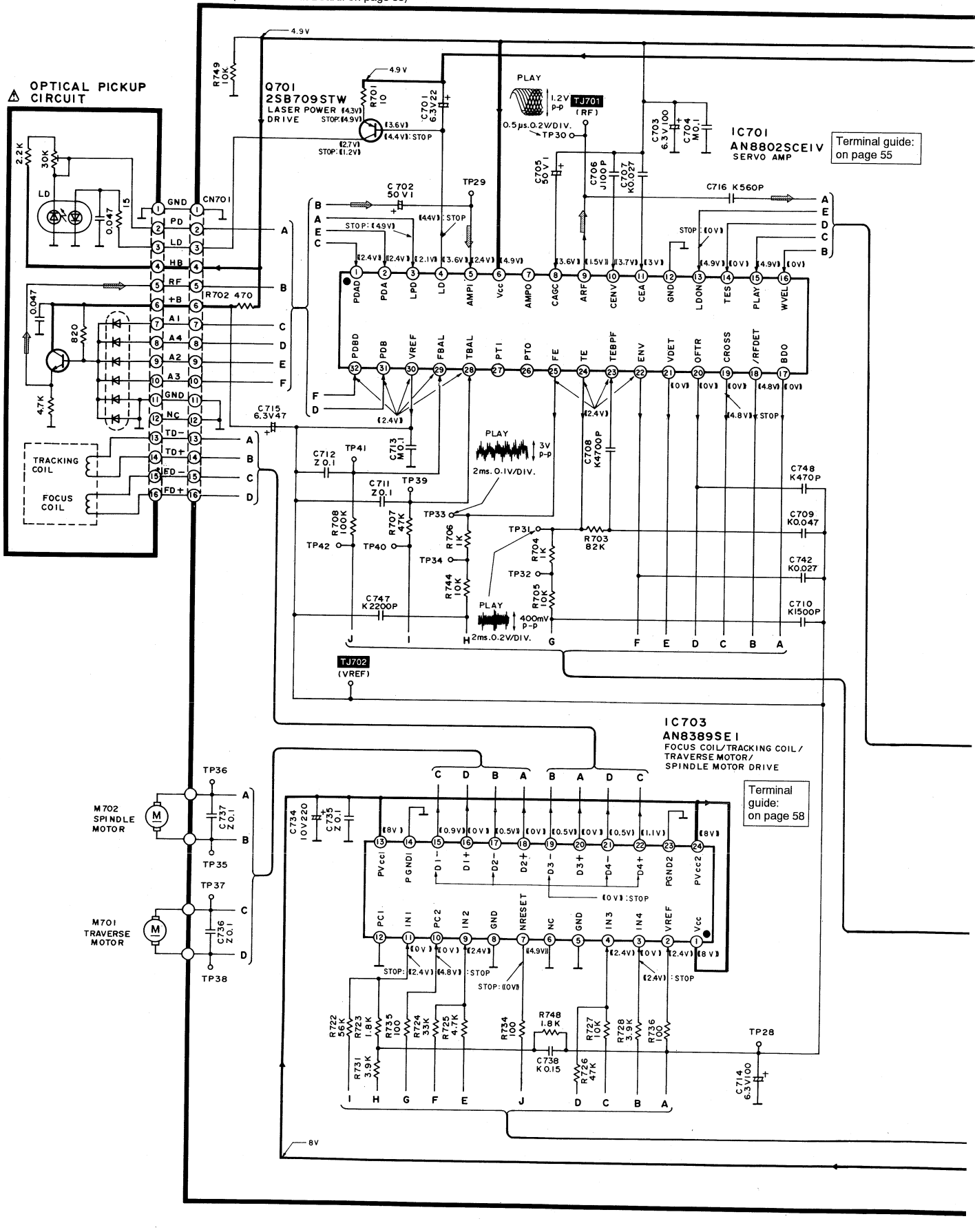
No mark	TAPE PLAYBACK	⌜ ⌟	TUNER
( )	MW/LW	< >	FM
(( ))	CD	[ ]	AUX
[[ ]]	REC	<< >>	HIGH SPEED EDIT

• Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

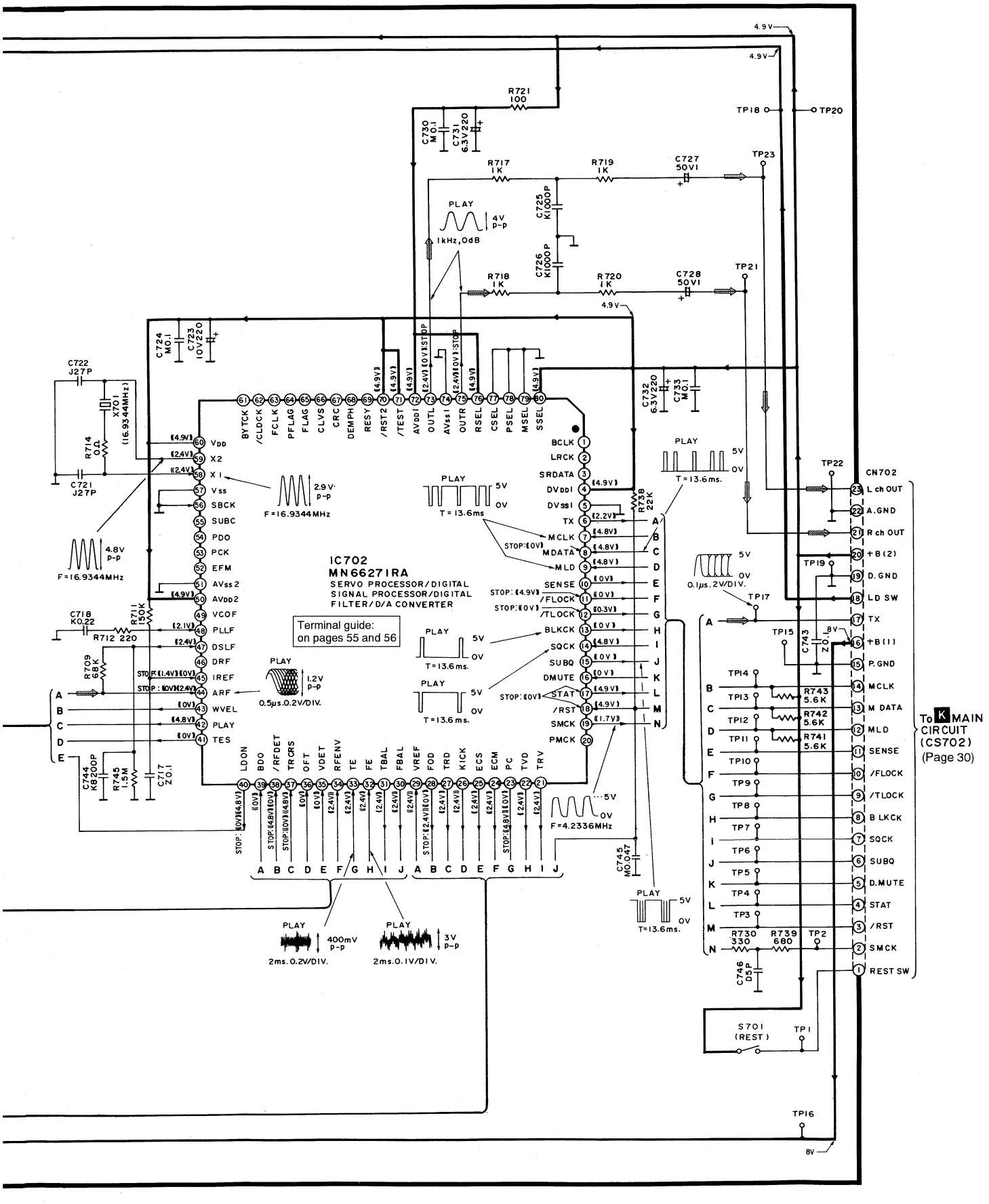
• **This schematic diagram may be modified at any time with the development of new technology.**

: CD Signal Line : +B Line

A CD CIRCUIT
(Printed Circuit Board: on page 33)



: CD Signal Line : +B Line

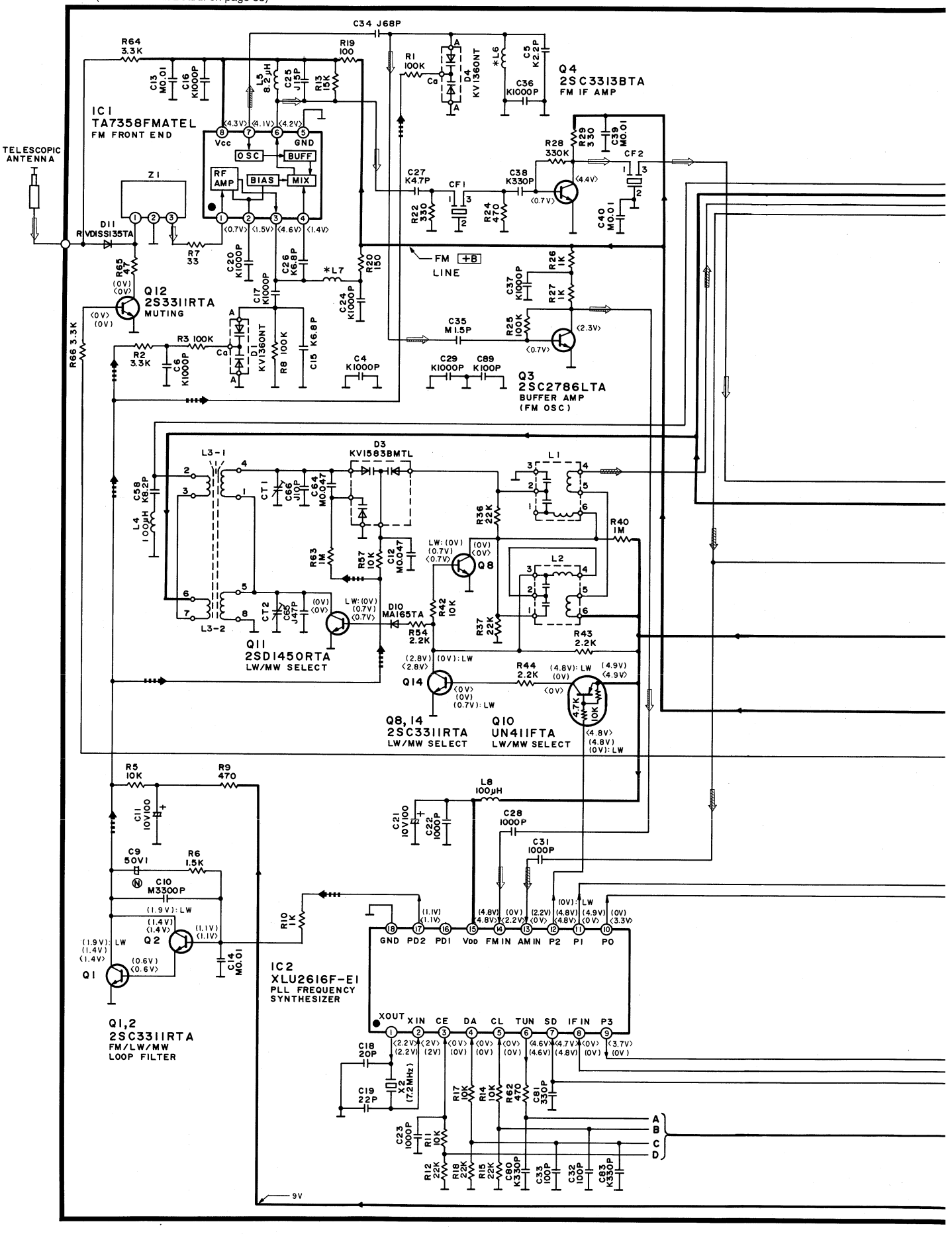


: FM Signal Line : FM OSC Signal Line : MW/LW OSC Signal Line

: FM/MW/LW Vcap Control Signal Line : +B Line

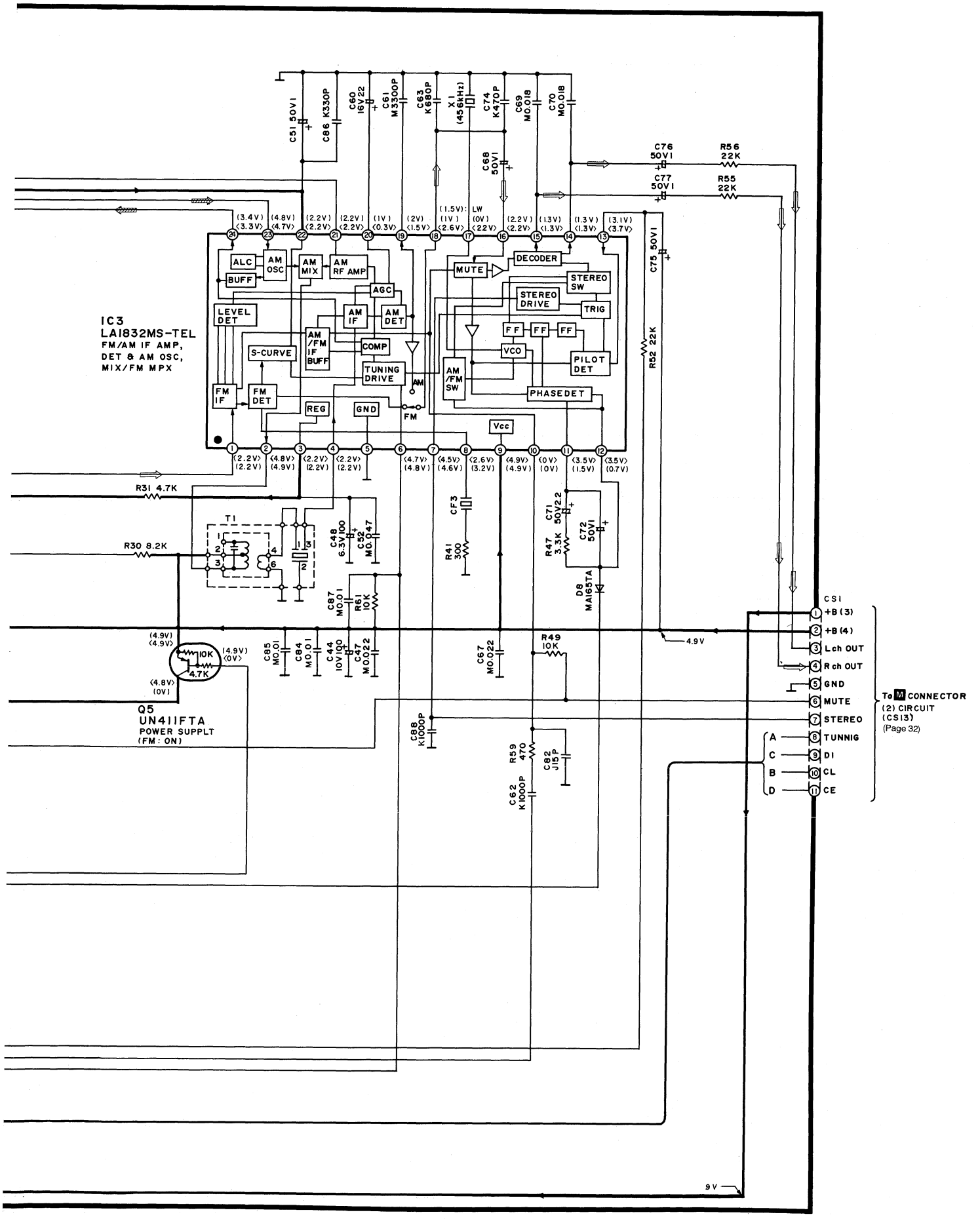
B TUNER CIRCUIT

(Printed Circuit Board: on page 33)


TELESCOPIC ANTENNA
IC1 TA7358FMATEL FM FRONT END
Vcc GND OSC BUFF RF AMP BIAS MIX
Q4 2SC3313BTA FM IF AMP
Q12 2S3311RTA MUTING
Q3 2SC2786LTA BUFFER AMP (FM OSC)
FM +B LINE
D3 KV1583BMTL
Q11 2SD1450RTA LW/MW SELECT
Q8, 14 2SC3311RTA LW/MW SELECT
Q10 UN411FTA LW/MW SELECT
Q1,2 2SC3311RTA FM/LW/MW LOOP FILTER
IC2 XLU2616F-E1 PLL FREQUENCY SYNTHESIZER
GND PD2 PD1 Vdd FMIN AMIN P2 P1 P0
XOUT XIN CE DA CL TUN SD IFIN P3
9V

: FM Signal Line : FM OSC Signal Line : MW/LW OSC Signal Line

: FM/MW/LW Vcap Control Signal Line : +B Line



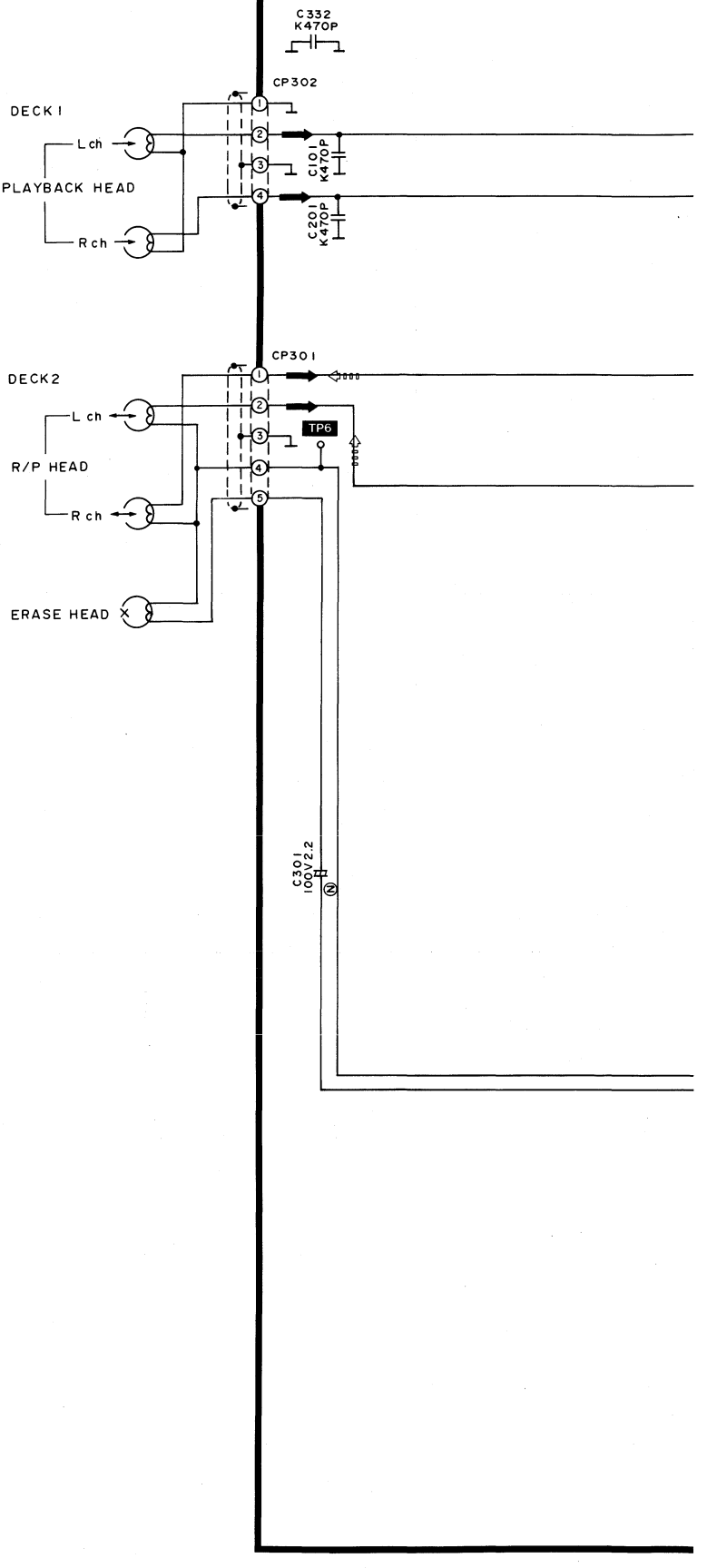
: Tape Playback Signal Line

: Record Signal Line

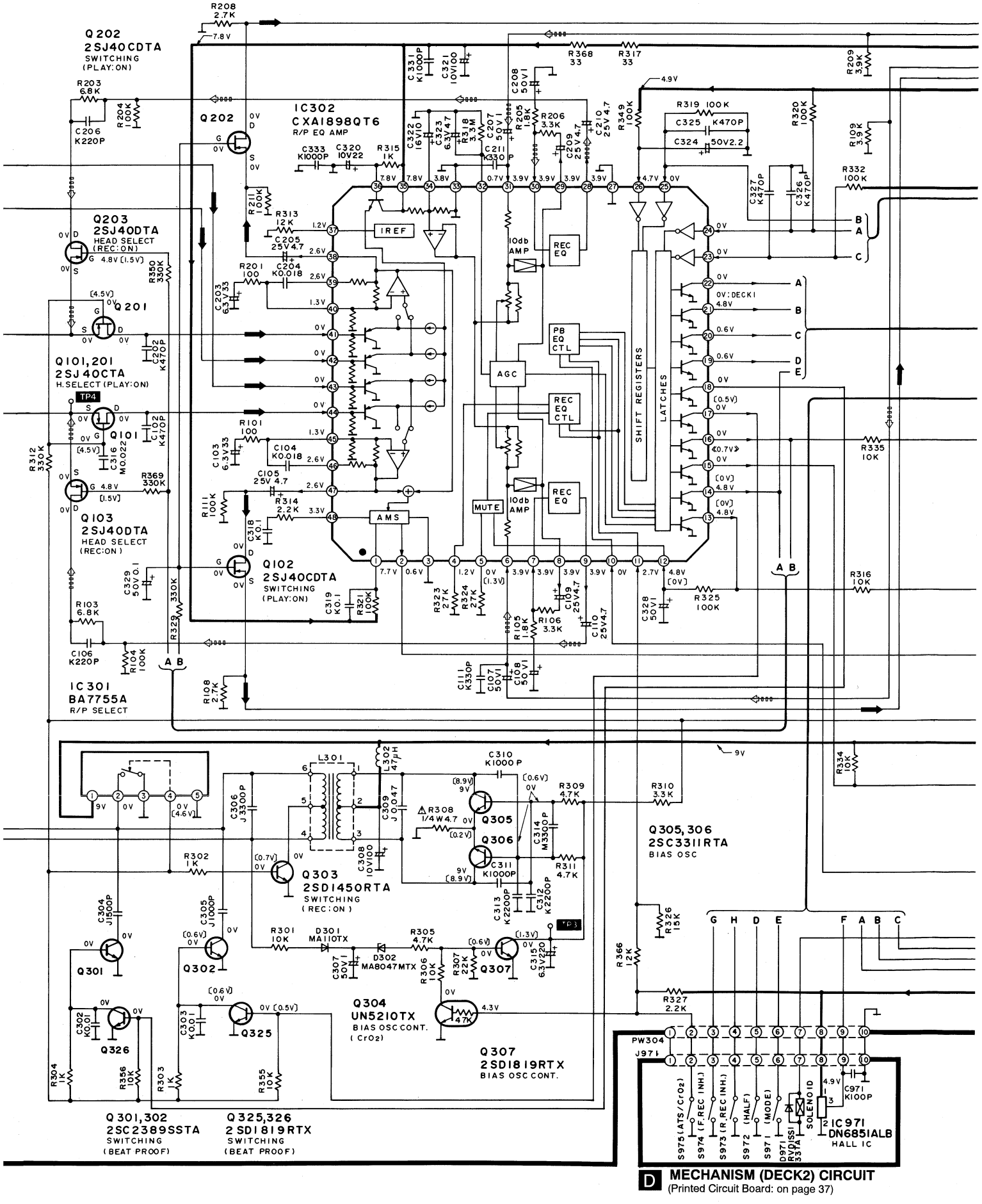
: +B Line

C MECHANISM CONTROL CIRCUIT

(Printed Circuit Board: on page 34)

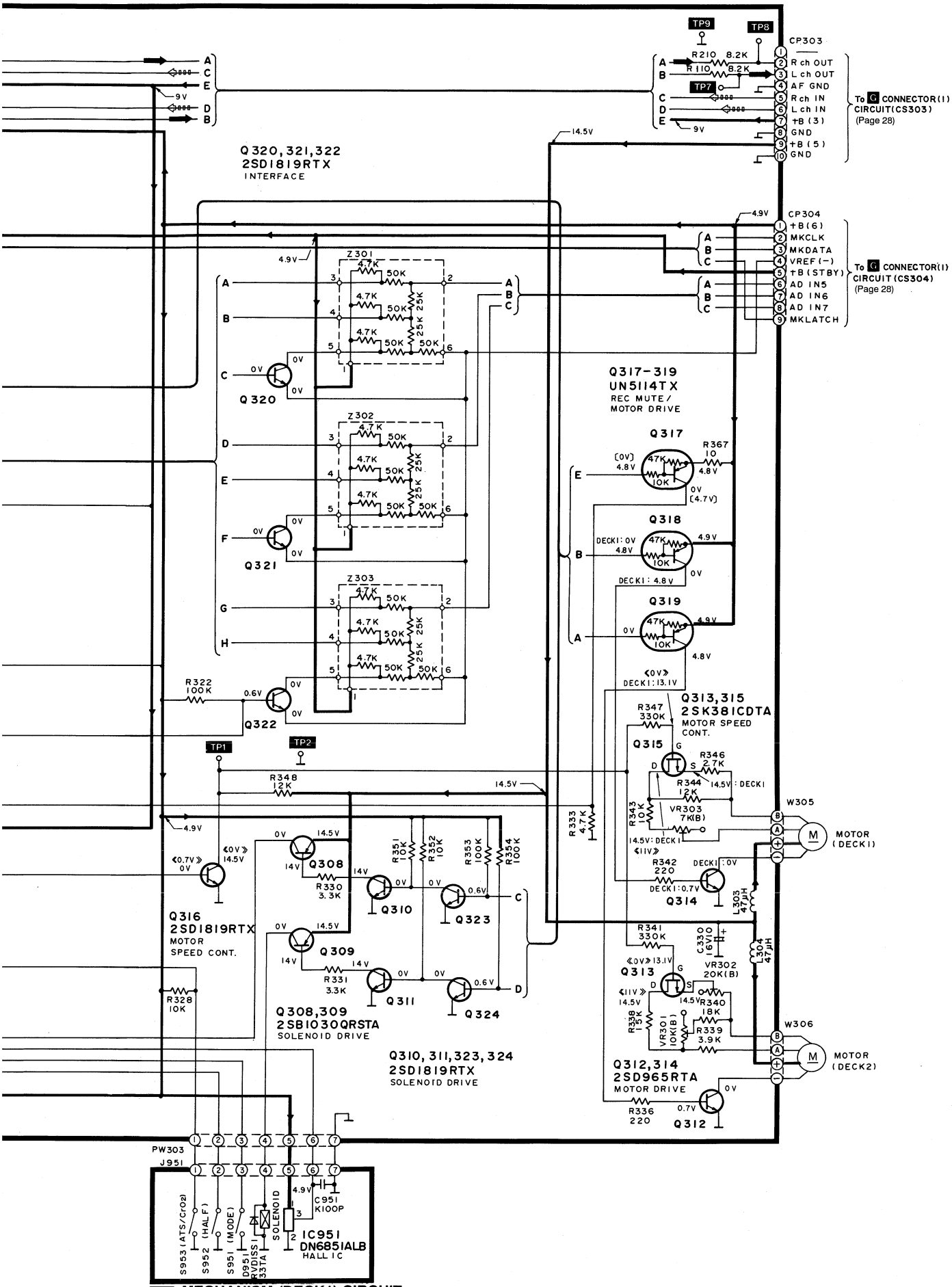


: Tape Playback Signal Line : Record Signal Line : +B Line



D MECHANISM (DECK2) CIRCUIT
(Printed Circuit Board: on page 37)

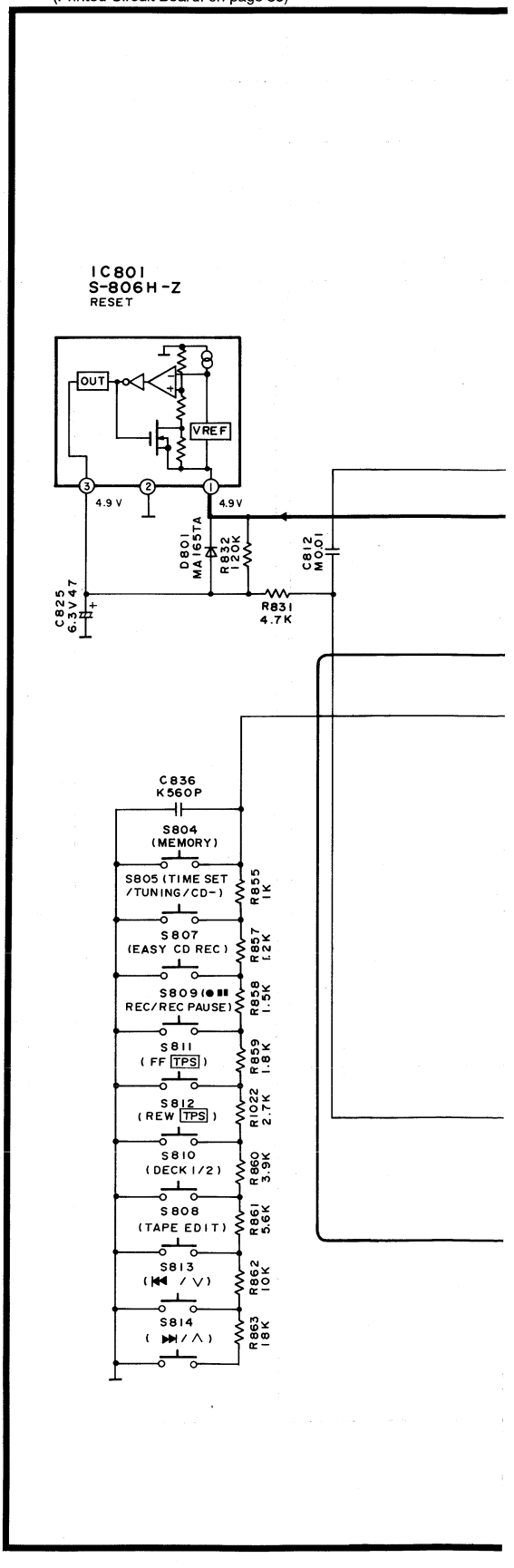
C MECHANISM CONTROL CIRCUIT

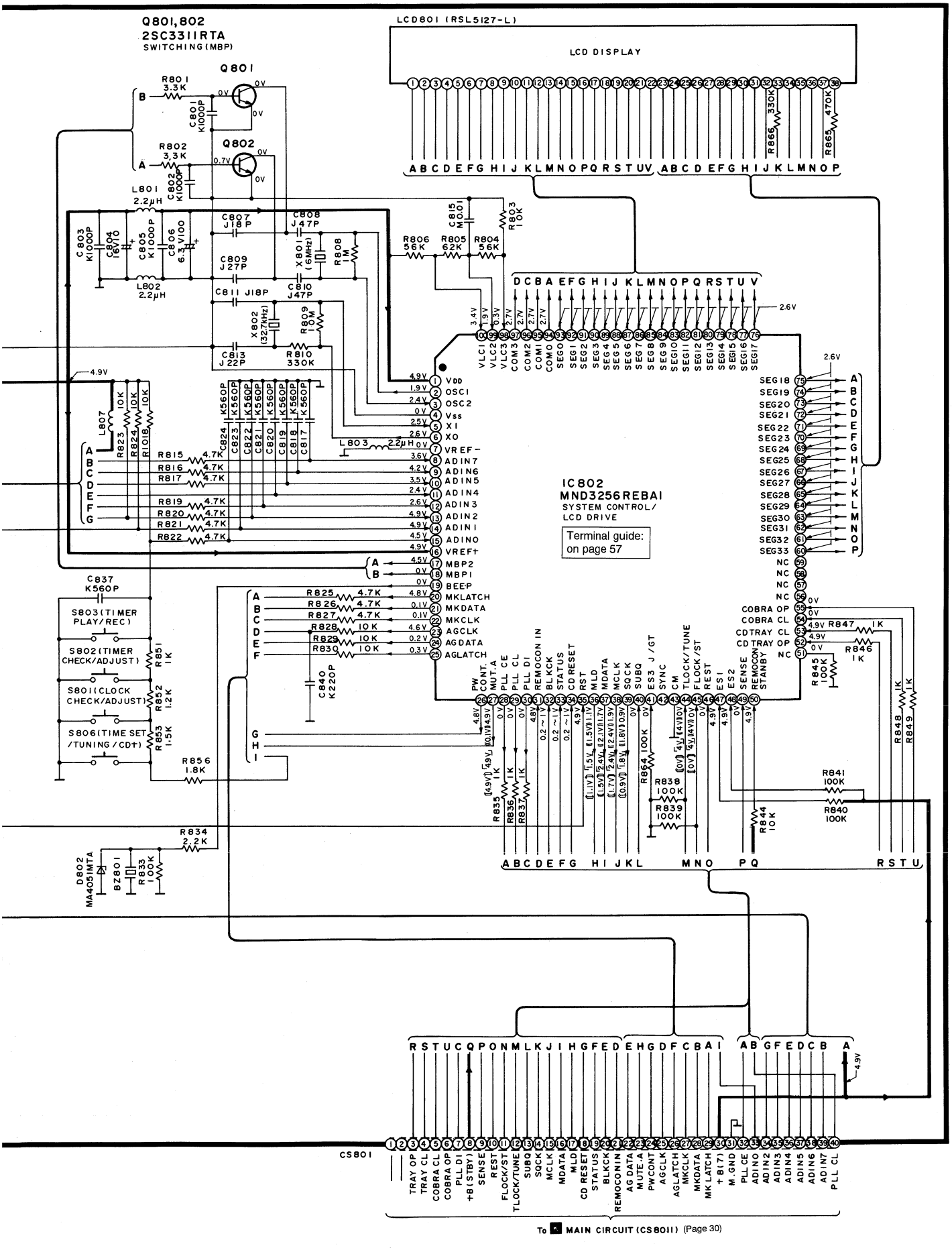


E MECHANISM (DECK1) CIRCUIT
(Printed Circuit Board: on page 37)

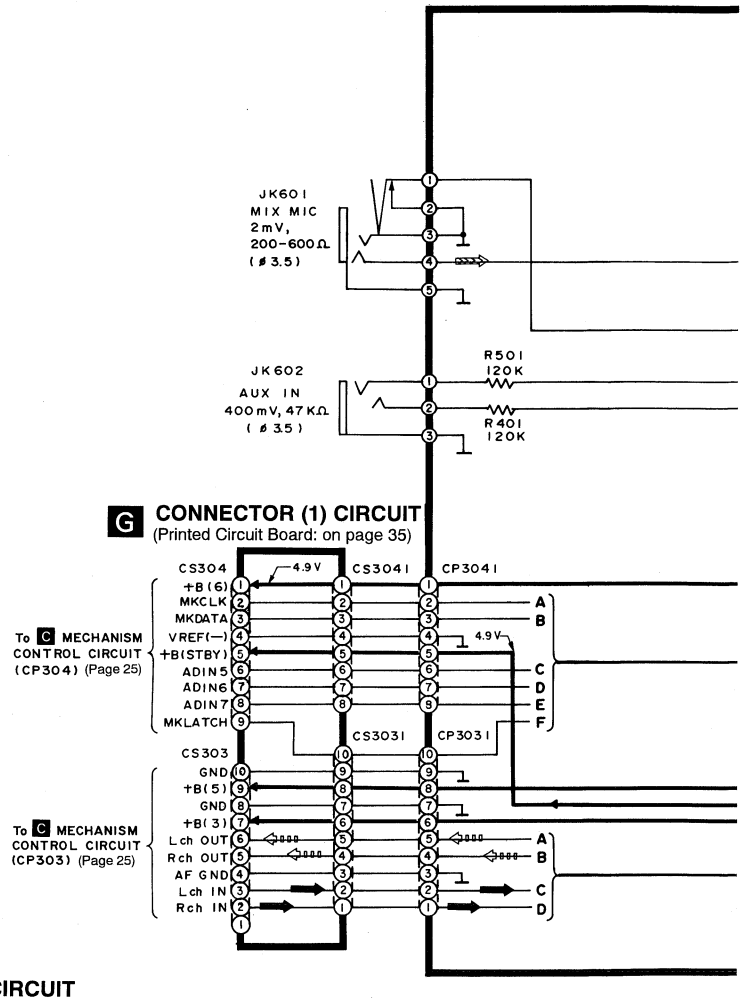
: +B Line

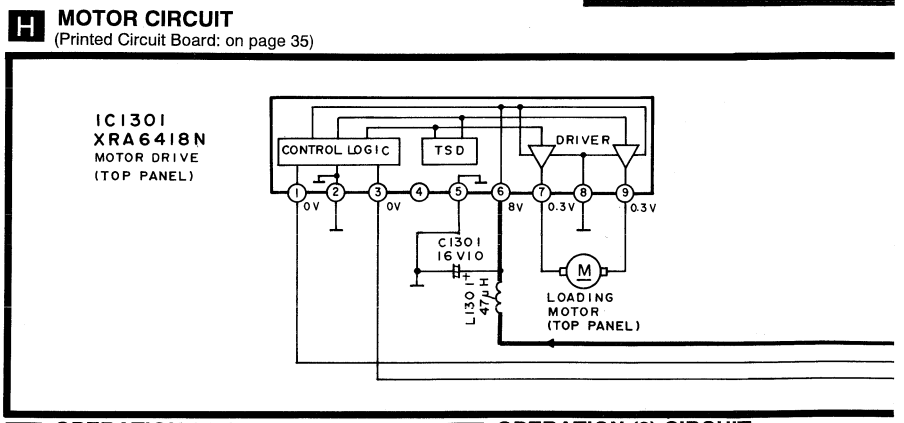
F LCD CIRCUIT
(Printed Circuit Board: on page 35)

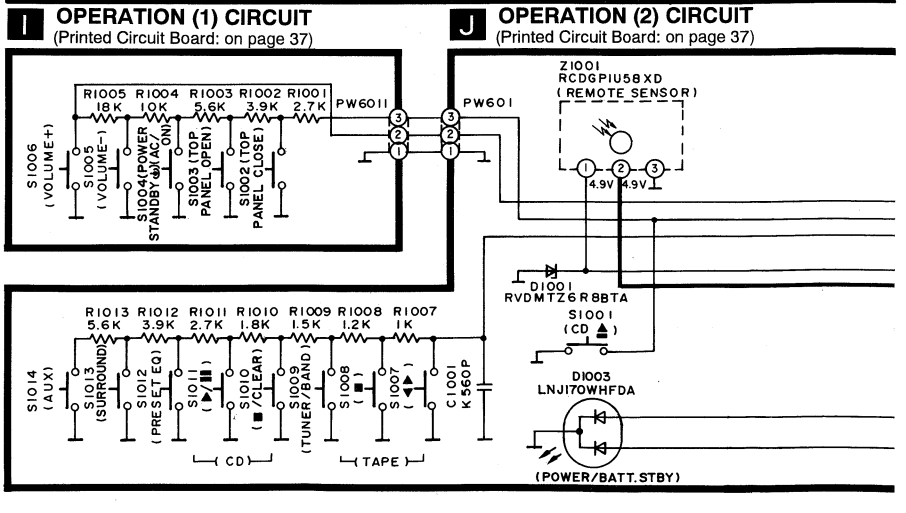



Q801,802
2SC3311RTA
SWITCHING (MBP)
Q801
Q802
LCD801 (RSL5127-L)
LCD DISPLAY
IC802
MND3256REBAI
SYSTEM CONTROL/
LCD DRIVE
Terminal guide:
on page 57
CS801
To MAIN CIRCUIT (CS8011) (Page 30)

: CD Signal Line
: FM Signal Line
: Tape Playback Signal Line
: Record Signal Line
: MIC Signal Line
: Main Signal Line
: +B Line

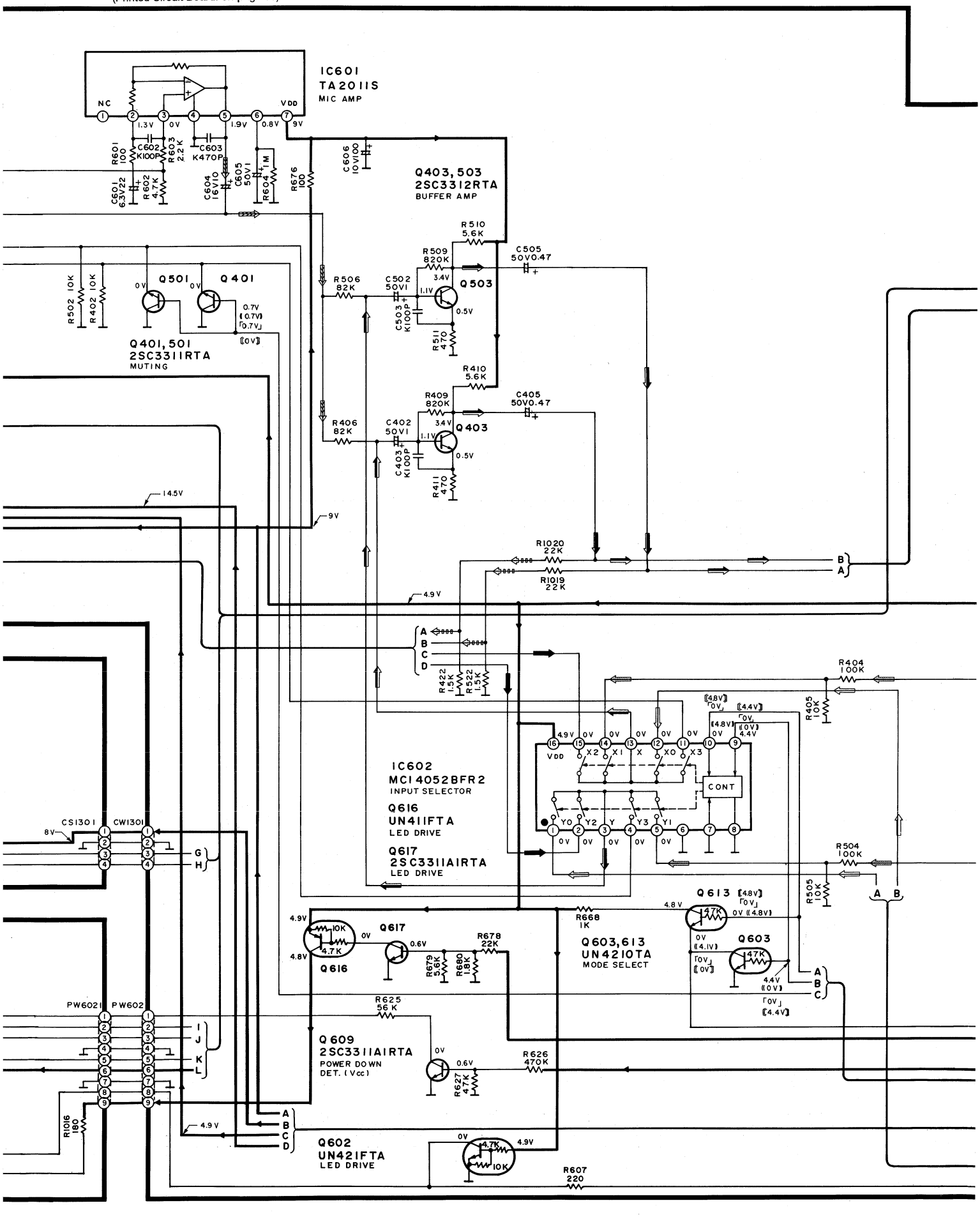


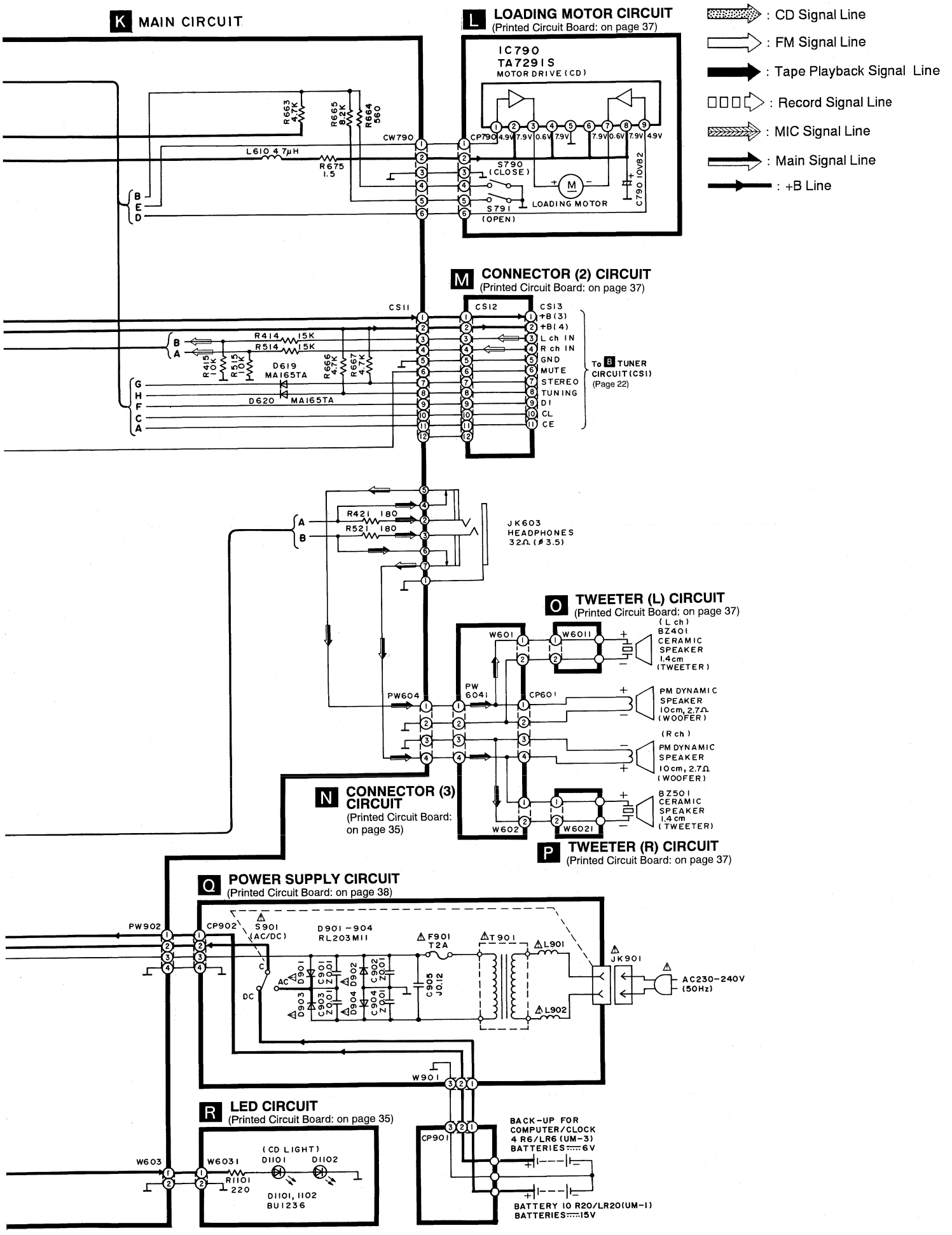




K MAIN CIRCUIT (MIC AMP/INPUT SELECTOR)

(Printed Circuit Board: on page 36)

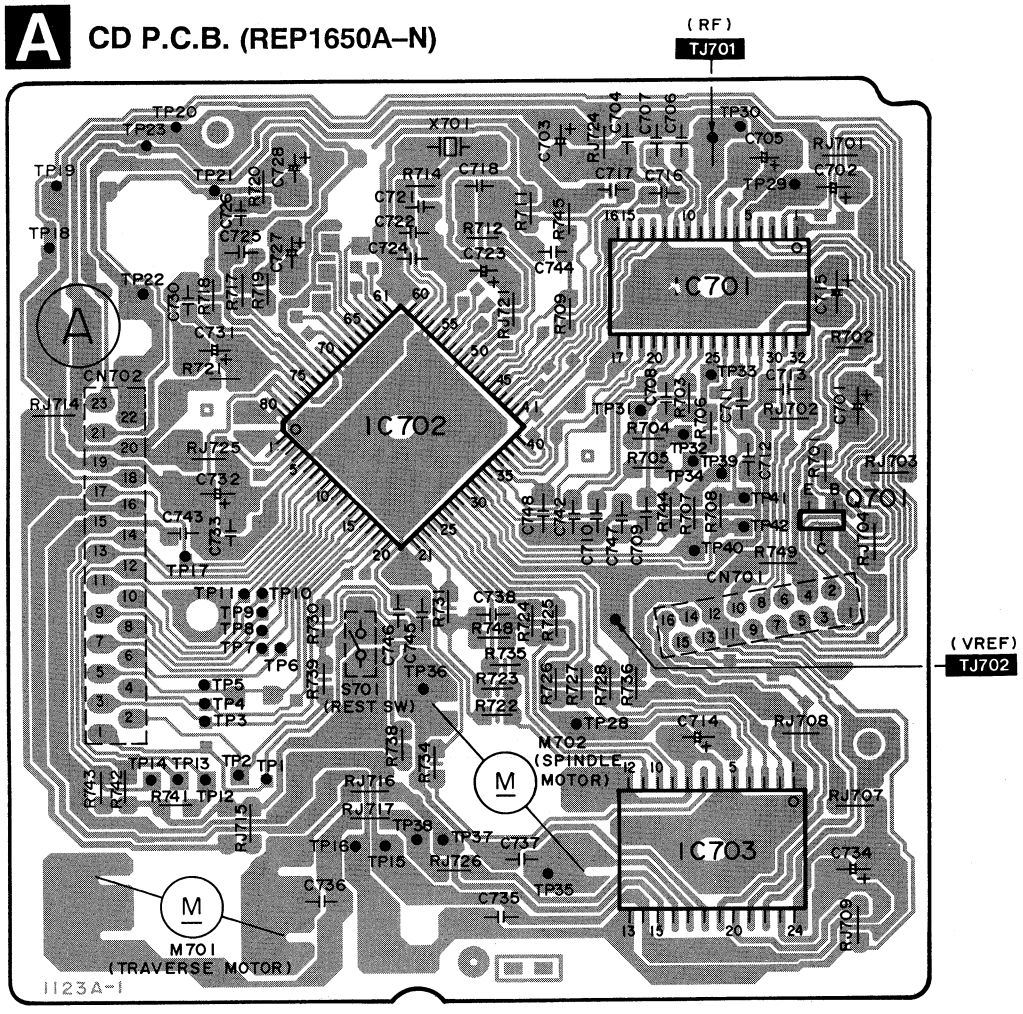



K MAIN CIRCUIT
L LOADING MOTOR CIRCUIT
(Printed Circuit Board: on page 37)
IC790
TA7291S
MOTOR DRIVE (CD)
CP790 4.9V 7.9V 0.6V 7.9V 7.9V 0.6V 7.9V 4.9V
CW790
L610 4.7μH
R675 1.5
R663 4.7K
R665 8.2K
R664 560
S790 (CLOSE)
S791 (OPEN)
LOADING MOTOR
C790 10V82
B E D
M CONNECTOR (2) CIRCUIT
(Printed Circuit Board: on page 37)
CS11
CS12
CS13
+B(3)
+B(4)
L ch IN
R ch IN
GND
MUTE
STEREO
TUNING
DI
CL
CE
To B TUNER CIRCUIT (CS1) (Page 22)
R414 15K
R514 15K
R415 10K
R515 10K
D619 MA165TA
D620 MA165TA
R666 4.7K
R667 4.7K
JK603 HEADPHONES 32Ω (ø3.5)
R421 180
R521 180
O TWEETER (L) CIRCUIT
(Printed Circuit Board: on page 37)
W601
W6011
(L ch) BZ401 CERAMIC SPEAKER 1.4cm (TWEETER)
PW604
PW 6041
CP601
PM DYNAMIC SPEAKER 10cm, 2.7Ω (WOOFER)
(R ch)
PM DYNAMIC SPEAKER 10cm, 2.7Ω (WOOFER)
BZ501 CERAMIC SPEAKER 1.4cm (TWEETER)
W602
W6021
N CONNECTOR (3) CIRCUIT
(Printed Circuit Board: on page 35)
P TWEETER (R) CIRCUIT
(Printed Circuit Board: on page 37)
Q POWER SUPPLY CIRCUIT
(Printed Circuit Board: on page 38)
PW902
CP902
S901 (AC/DC)
D901-904 RL203M11
F901 T2A
T901
L901
L902
JK901
AC230-240V (50Hz)
C905 J0.12
W901
R LED CIRCUIT
(Printed Circuit Board: on page 35)
W603
W6031
(CD LIGHT)
DI101
DI102
RI101 220
DI101, 1102 BU1236
CP901
BACK-UP FOR COMPUTER/CLOCK 4 R6/LR6 (UM-3) BATTERIES 6V
BATTERY 10 R20/LR20 (UM-1) BATTERIES 15V
: CD Signal Line
: FM Signal Line
: Tape Playback Signal Line
: Record Signal Line
: MIC Signal Line
: Main Signal Line
: +B Line

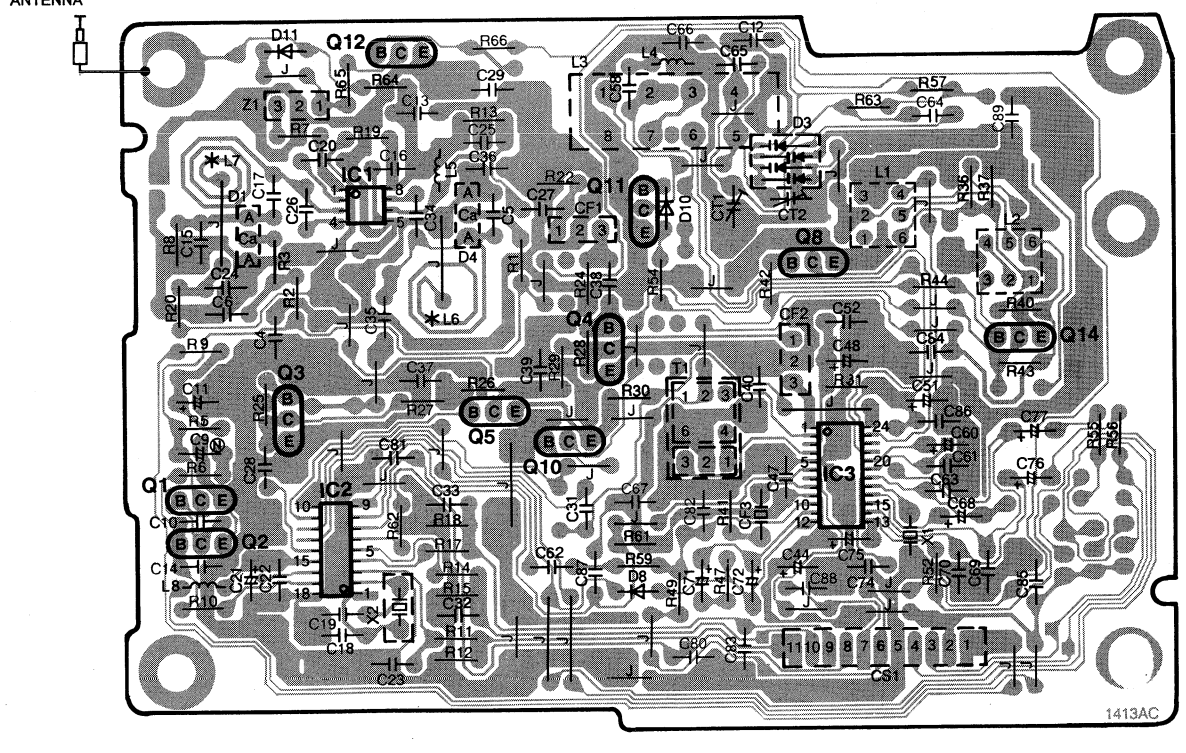
■ Printed Circuit Board Diagram

● This circuit board diagram may be modified at any time with the development of new technology.

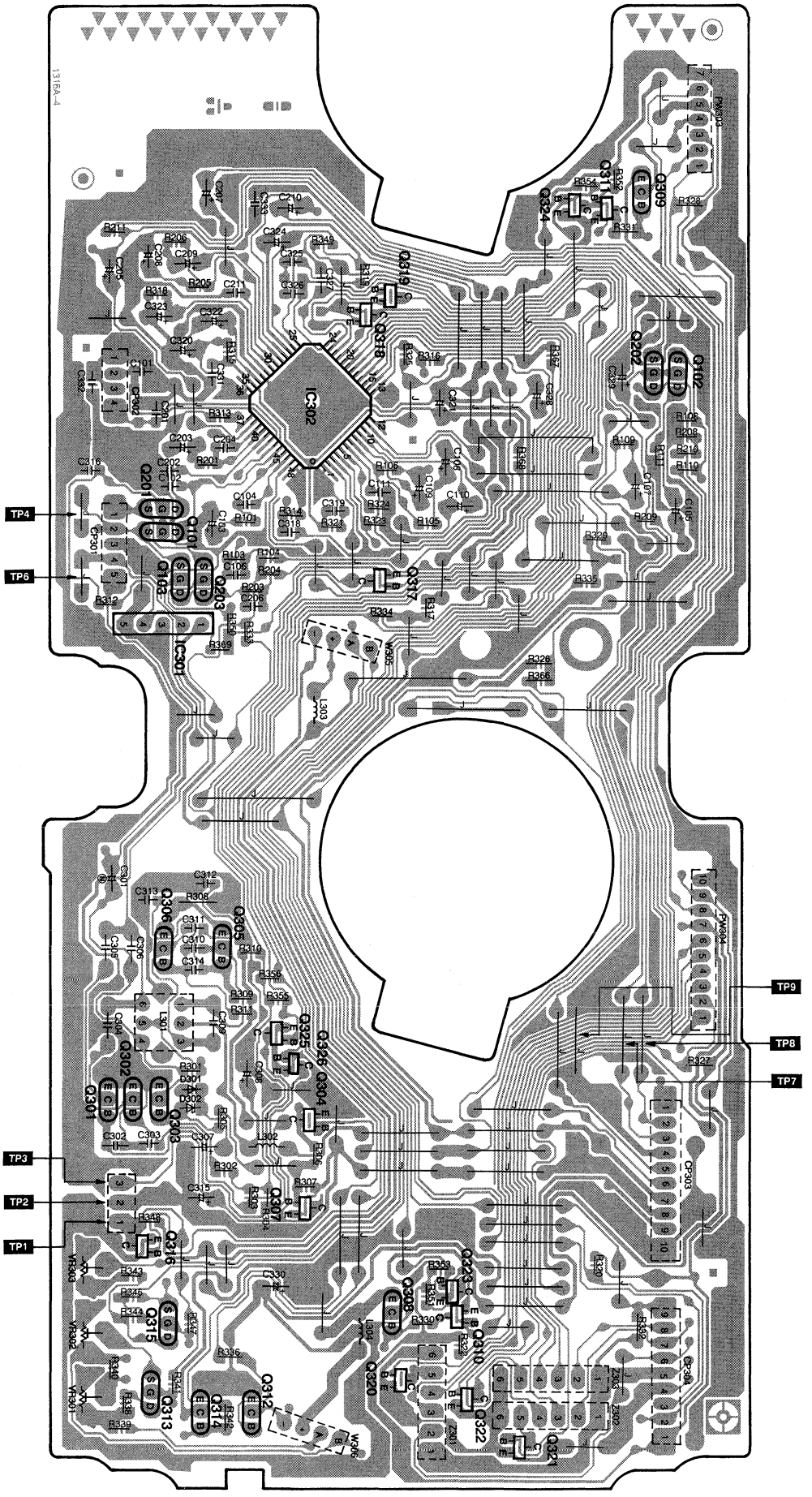
A CD P.C.B. (REP1650A–N)



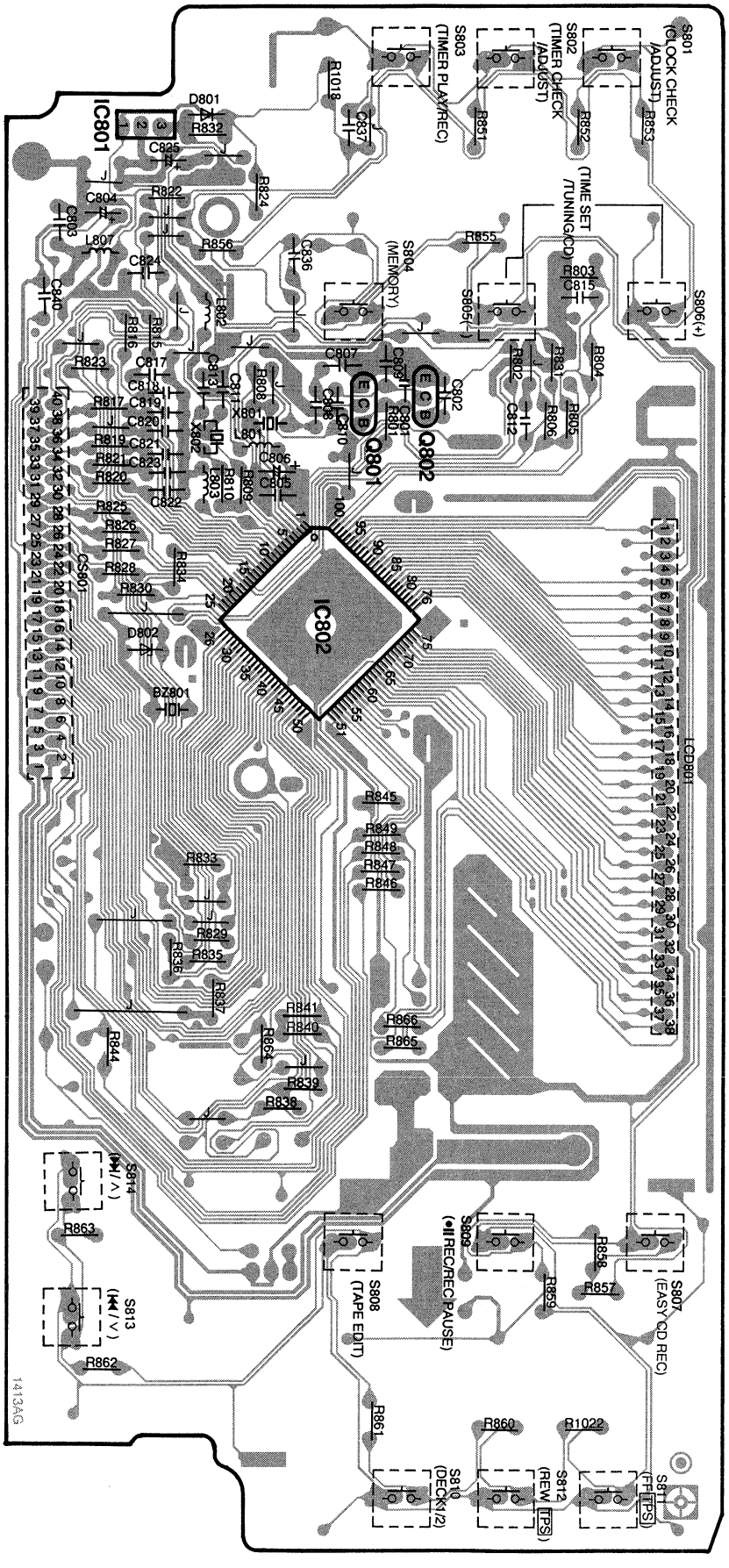
B TUNER P.C.B. (REP1976B)



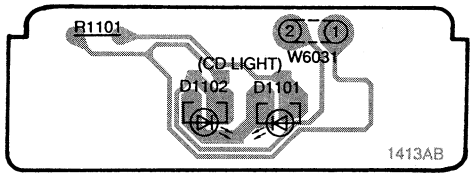
C MECHANISM CONTROL P.C.B. (REP1974B)



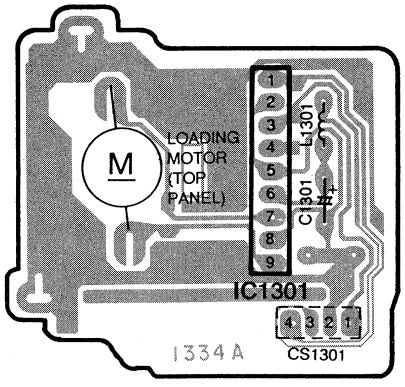
F LCD P.C.B. (REP1976B)



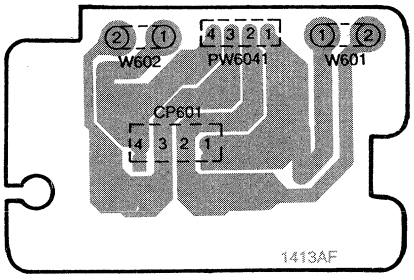
R LED P.C.B. (REP1976B)



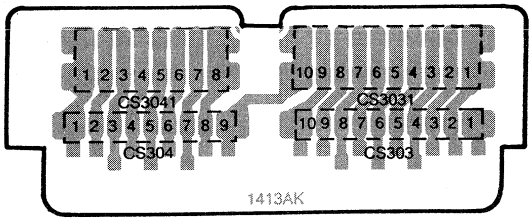
H MOTOR P.C.B. (REP1977A)



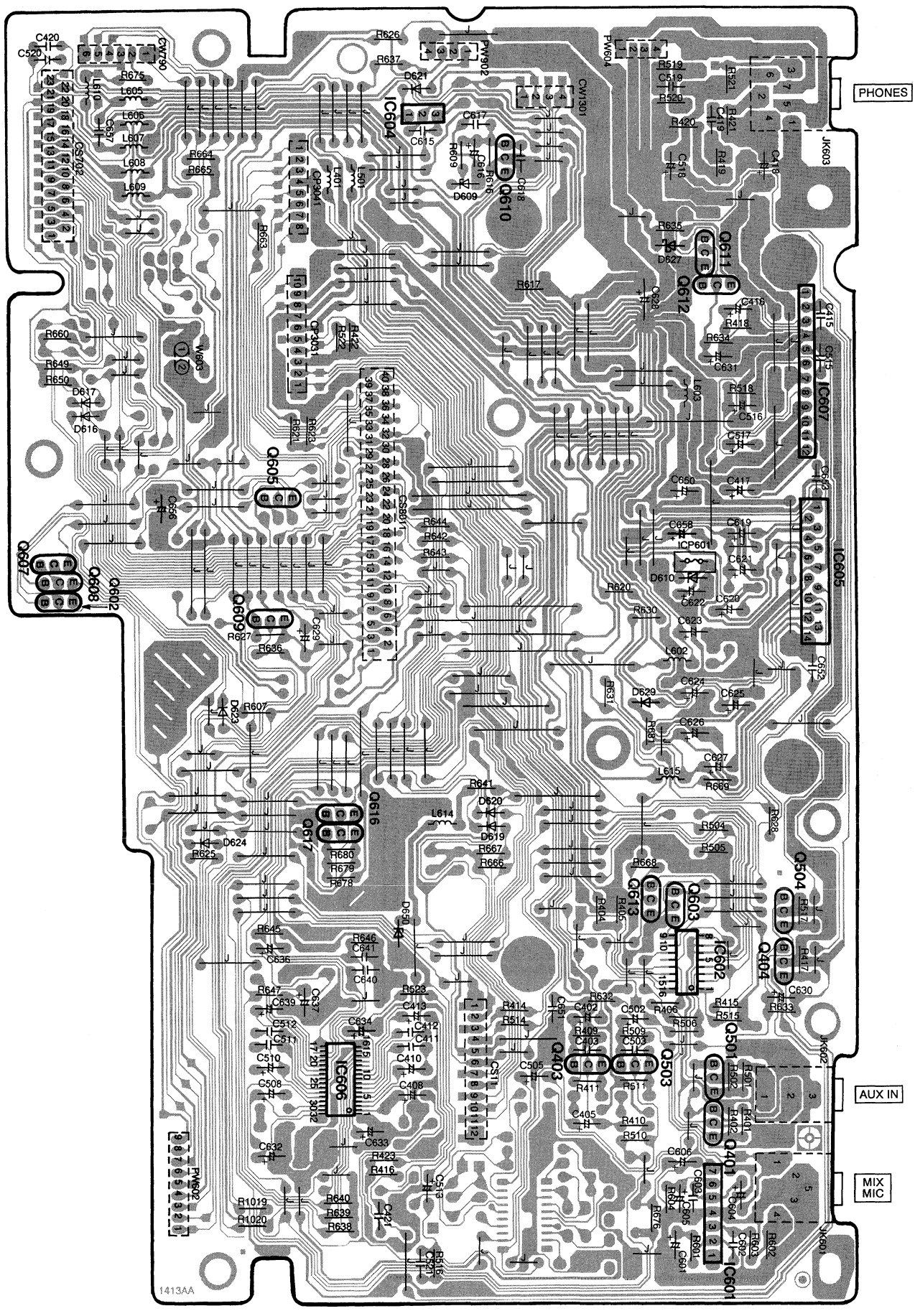
N CONNECTOR (3) P.C.B. (REP1976B)



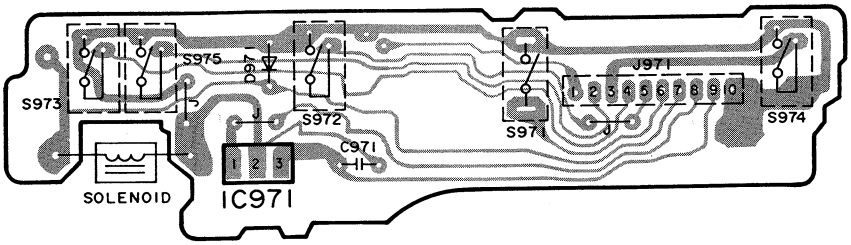
G CONNECTOR (1) P.C.B. (REP1976B)



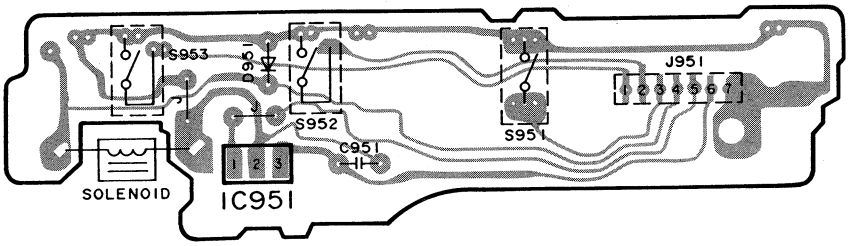
K MAIN P.C.B. (REP1976B)



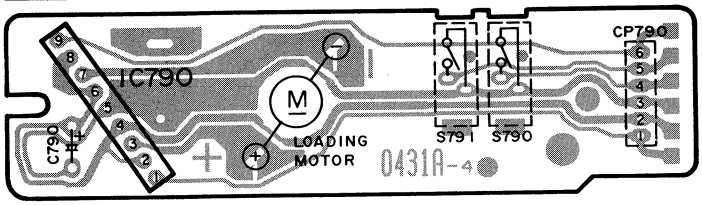
D MECHANISM (DECK2) P.C.B. (REP1978A)



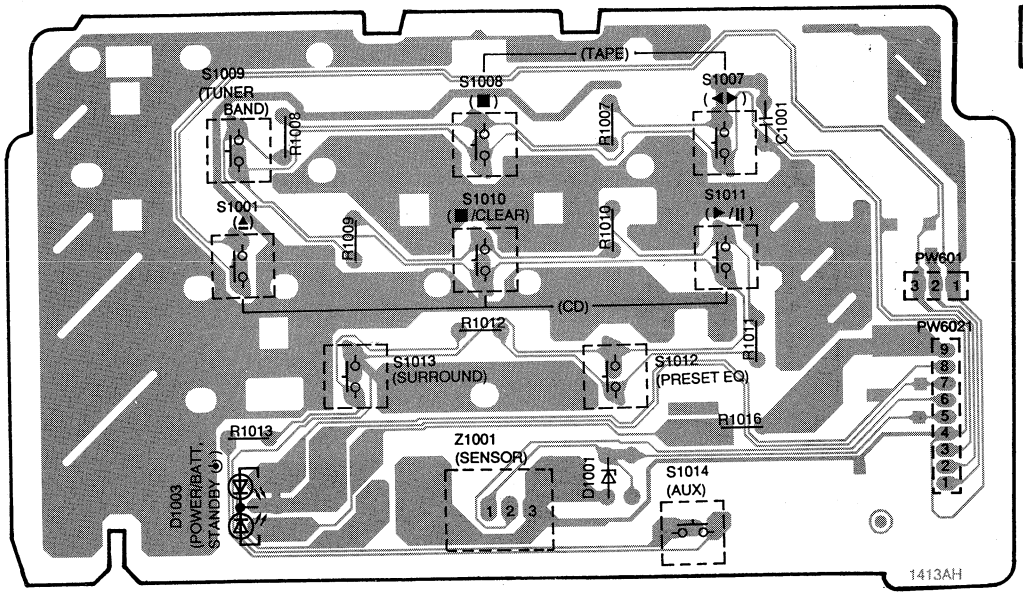
E MECHANISM (DECK1) P.C.B. (REP1150)



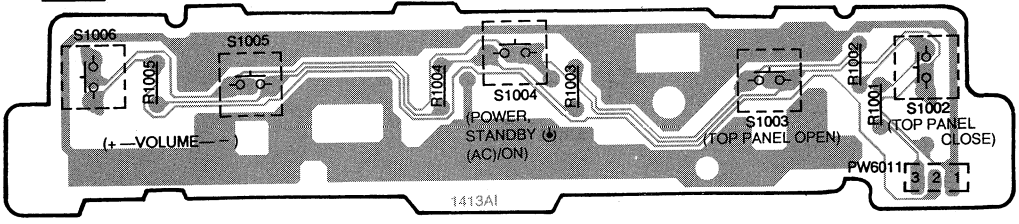
L LOADING MOTOR P.C.B. (REP0767)



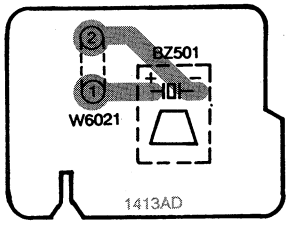
J OPERATION (2) P.C.B. (REP1976B)



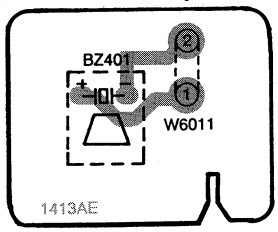
I OPERATION (1) P.C.B. (REP1976B)



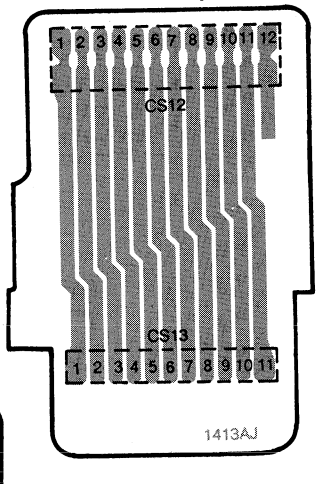
P TWEETER (R) P.C.B. (REP1976B)



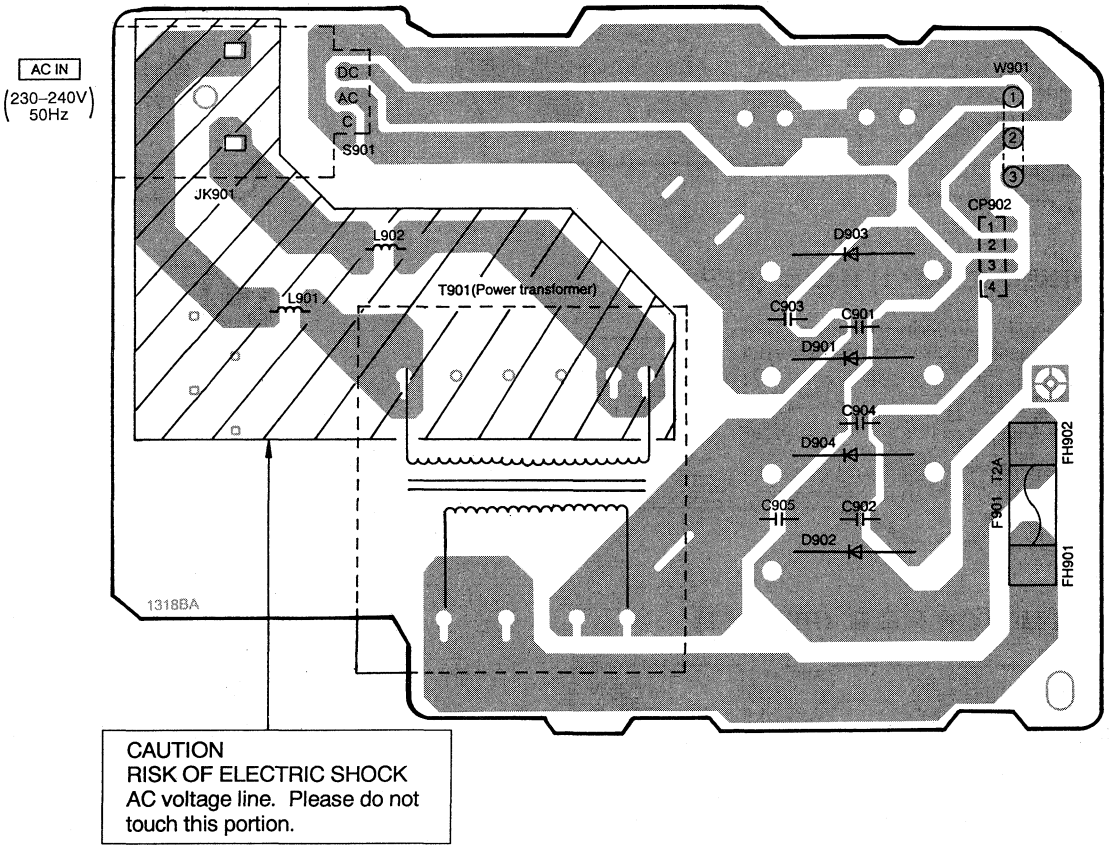
O TWEETER (L) P.C.B. (REP1976B)

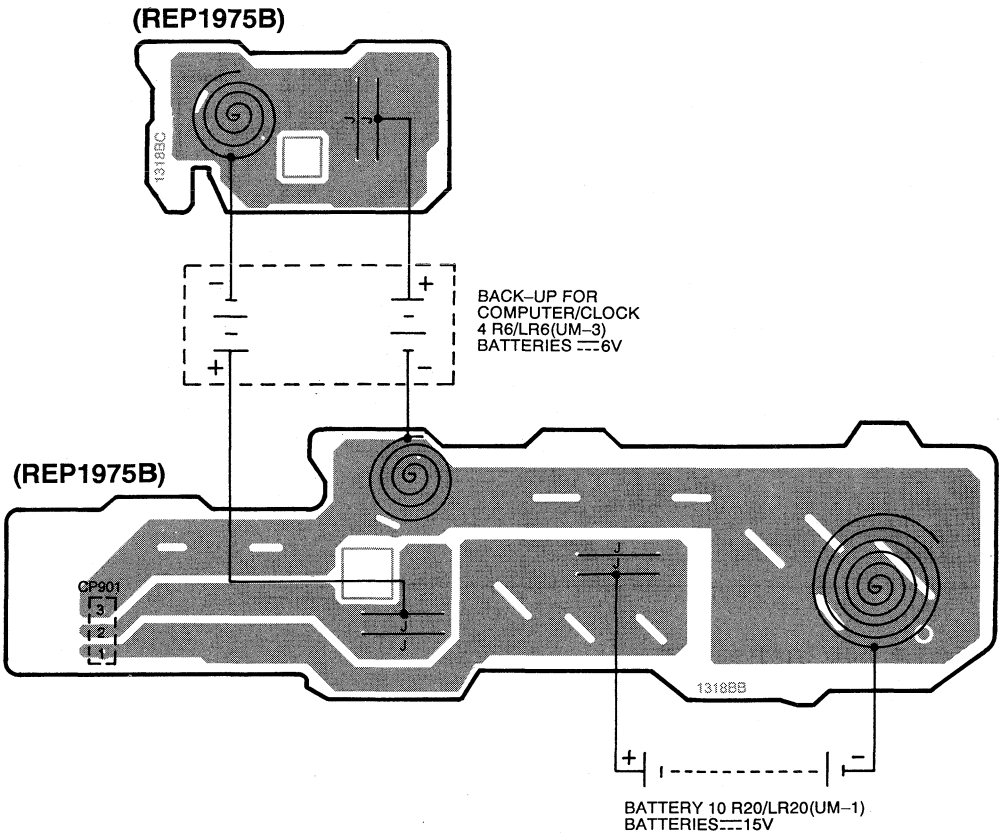


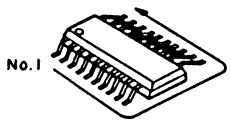
M CONNECTOR (2) P.C.B. (REP1976B)



Q POWER SUPPLY P.C.B. (REP1975B)

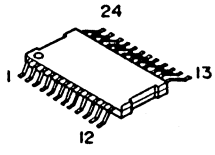




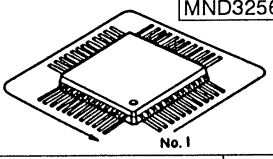


TA7358FMATEL	8Pin
MC14052BFR2	16Pin
XLU2616F-E1	18Pin
LA1832MS-TEL	24Pin
AN8802SCE1V	32Pin
BH3854FSE1	32Pin

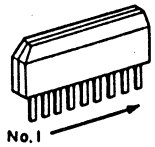
AN8389SE1



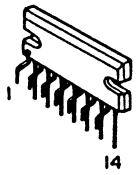
CXA1898QT6	48Pin
MN66271RA	80Pin
MND3256REBA1	100Pin



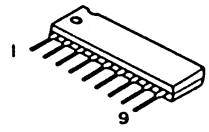
TA2011S	7Pin
TA7291S	9Pin



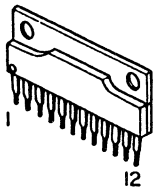
LA5610N



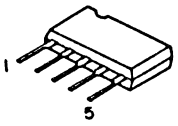
XRA6418N



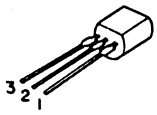
AN7135



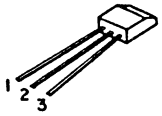
BA7755A



S-806H-Z
S81350HGZ



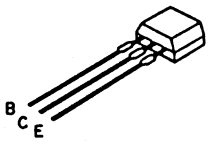
DN6851ALB



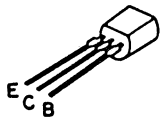
2SB1030QRSTA
2SC2786LTA
2SC3311AIRTA
2SC3311R
2SC3312RTA
2SC3313B
2SD1450RTA

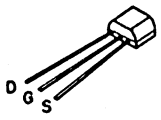
UN411FTA
UN4111
UN421FTA
UN4210-S
UN4213

2SC2389SSTA



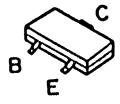
2SD965Q

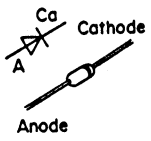




2SK381BCDTA
2SJ40CTA
2SJ40DTA
2SJ40CDTA

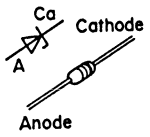
UN5114TX
UN5210TX
2SB709S
2SD1819RTX

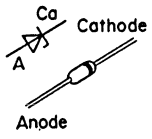




MA165
RVD1SS133TA
RVD1SS135TA

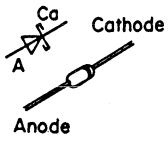
MA4051MTA



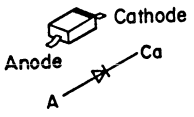


RVDMTZ6R8BTA
RVDMTZ8R2BTA
RVDMTZ10BTA

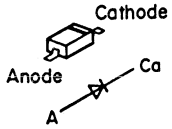
RB441QT77



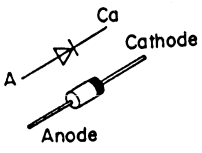
MA110TX



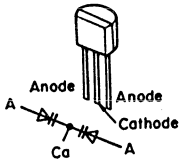
MA8047MTX



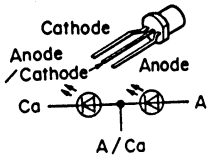
RL203M11



KV1360NT



LNJ170WHFDA



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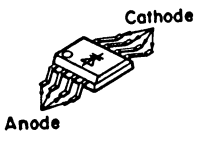
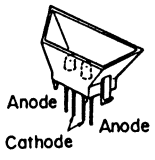
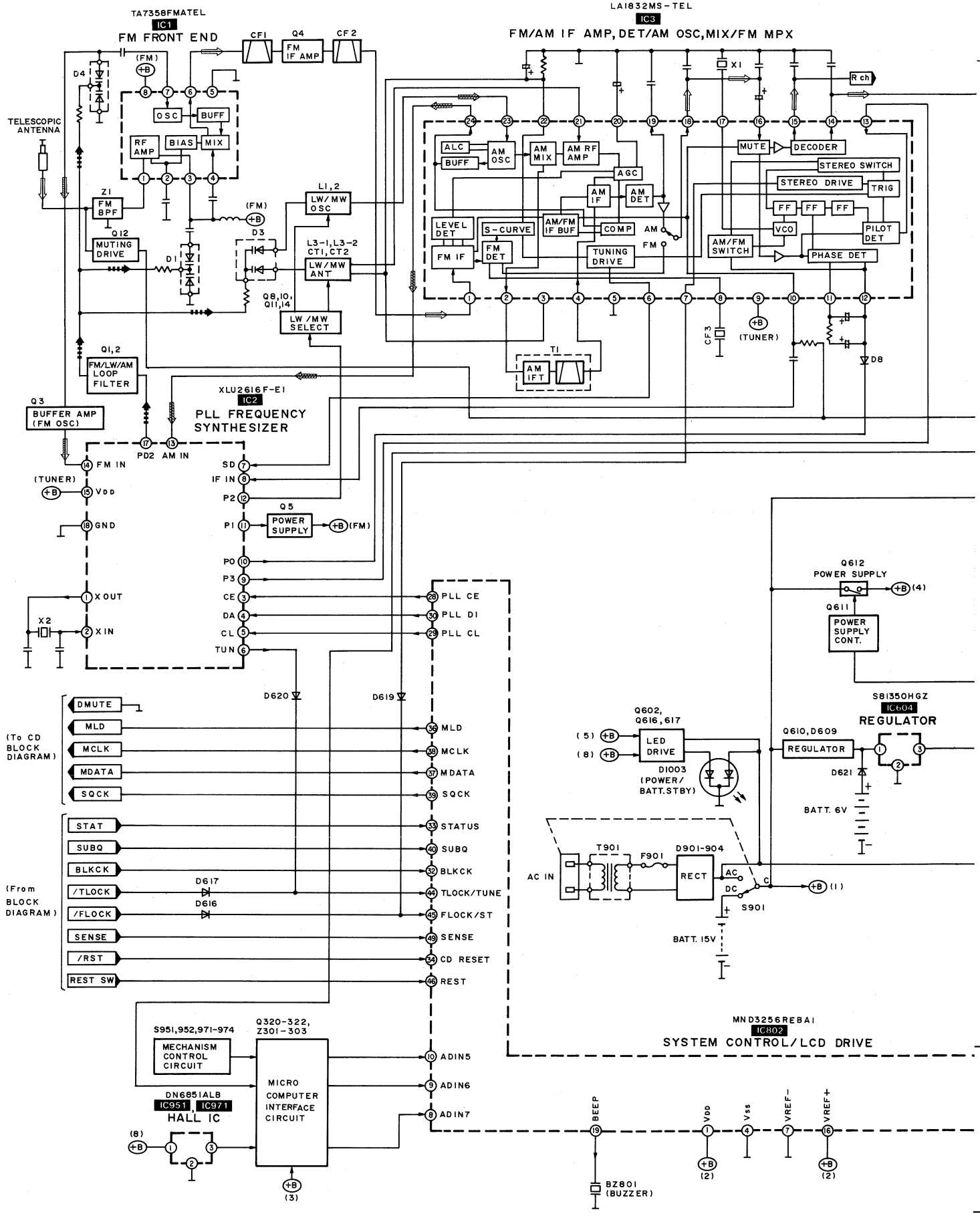
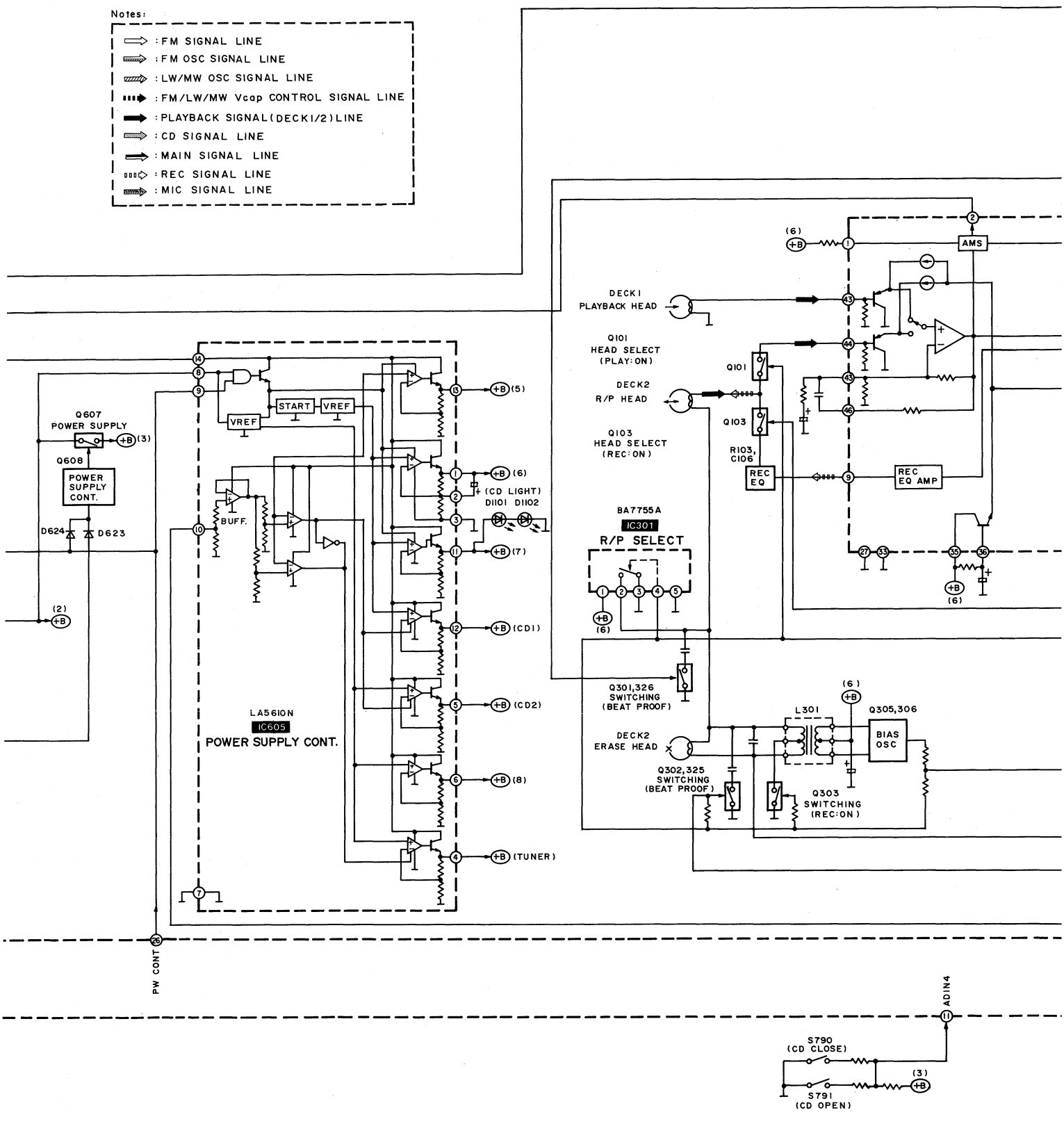


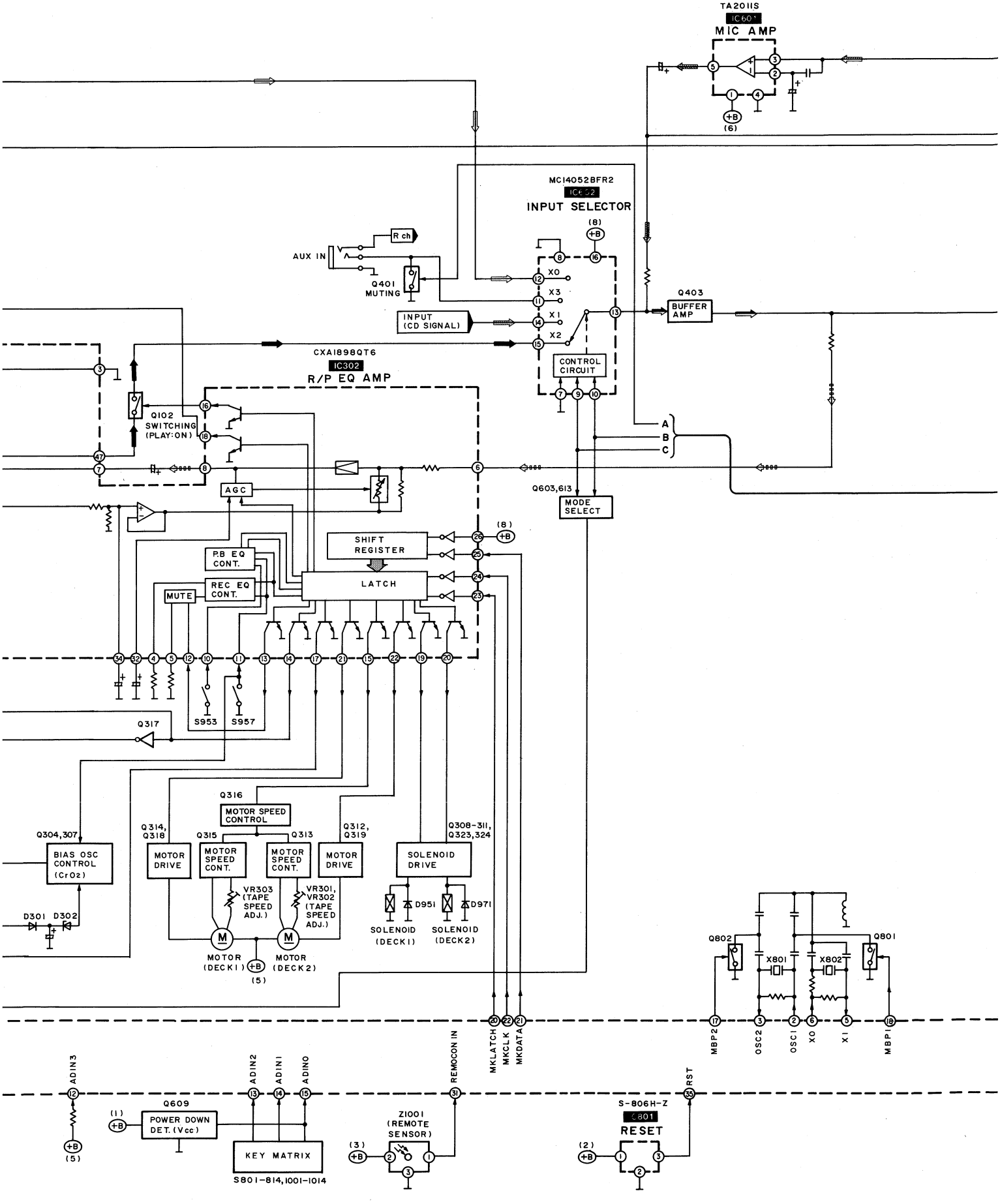
BU1236

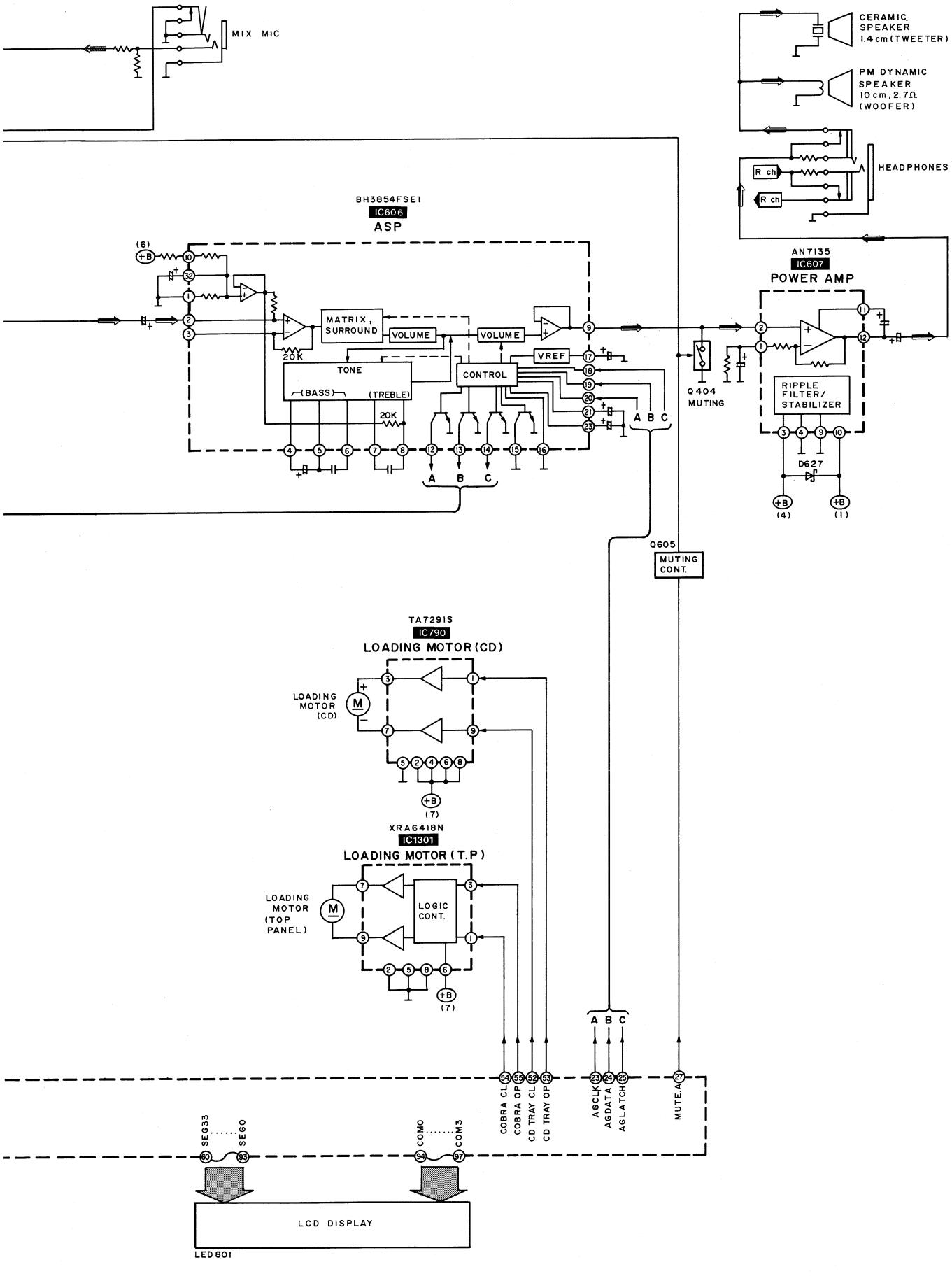


■ Block Diagram • Main Unit

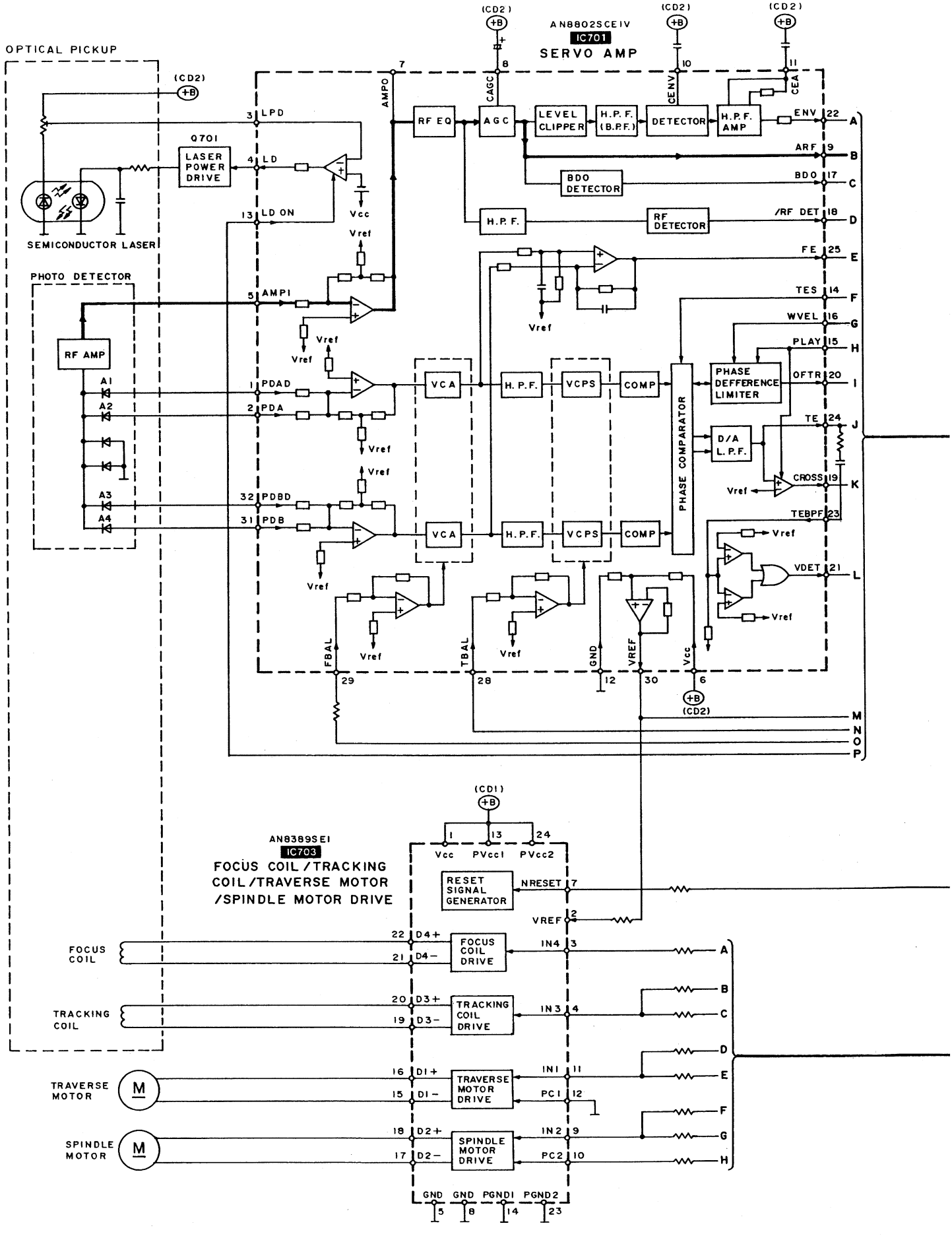


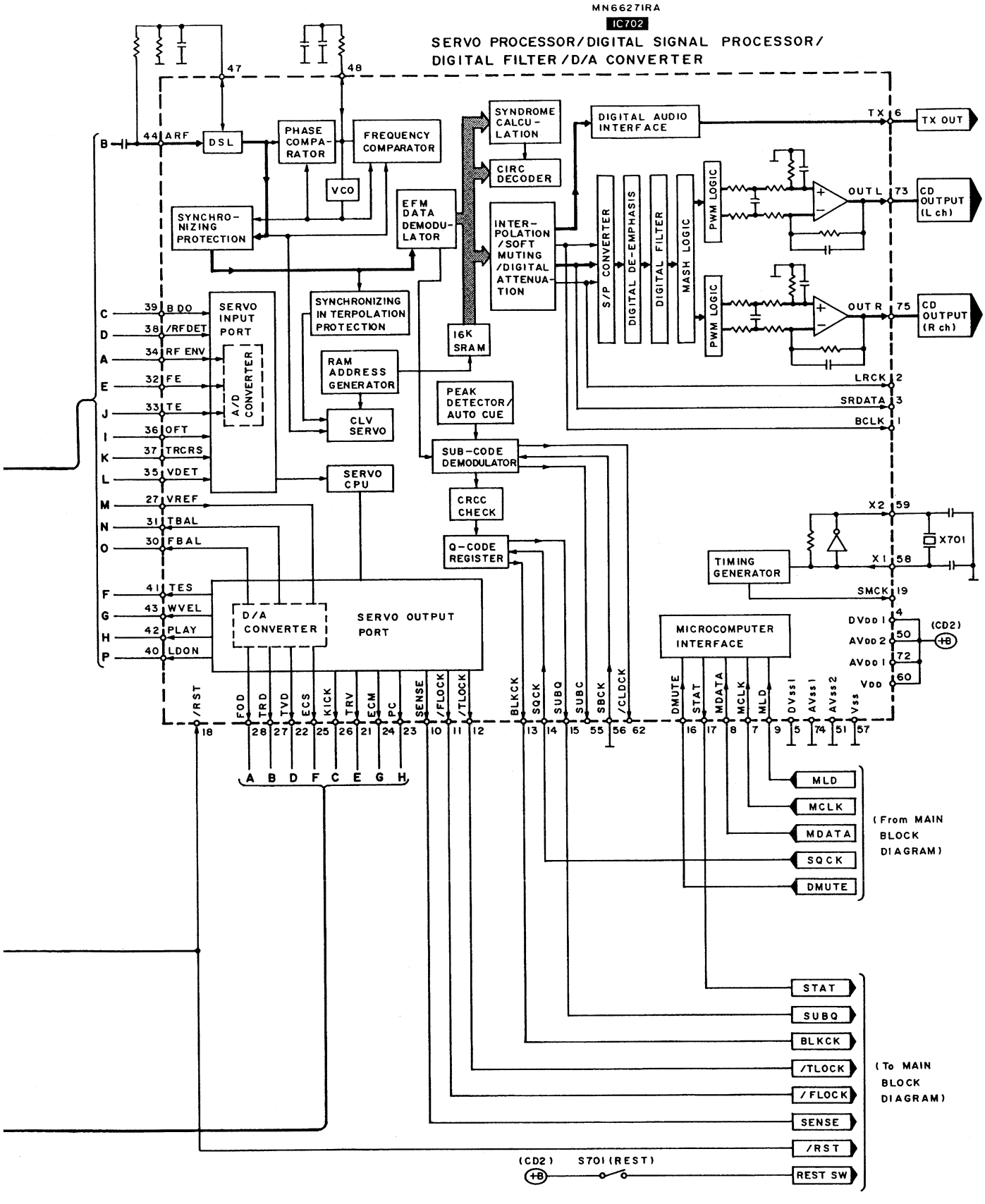

Notes:
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: LW/MW OSC SIGNAL LINE
: FM/LW/MW Vcap CONTROL SIGNAL LINE
: PLAYBACK SIGNAL(DECK1/2)LINE
: CD SIGNAL LINE
: MAIN SIGNAL LINE
: REC SIGNAL LINE
: MIC SIGNAL LINE
Q607
POWER SUPPLY
Q608
POWER SUPPLY CONT.
D624
D623
START
VREF
BUFF.
LA5610N
IC605
POWER SUPPLY CONT.
(CD LIGHT)
D1101 D1102
DECK1
PLAYBACK HEAD
Q101
HEAD SELECT
(PLAY:ON)
DECK2
R/P HEAD
Q103
HEAD SELECT
(REC:ON)
Q101
Q103
R103,
C106
REC EQ
REC EQ AMP
AMS
BA7755A
IC301
R/P SELECT
Q301,326
SWITCHING
(BEAT PROOF)
L301
Q305,306
BIAS OSC
DECK2
ERASE HEAD
Q302,325
SWITCHING
(BEAT PROOF)
Q303
SWITCHING
(REC:ON)
S790
(CD CLOSE)
S791
(CD OPEN)
PW CONT
ADIN4


TA2011S
IC601
MIC AMP
+B
(6)
MC14052BFR2
IC602
INPUT SELECTOR
(8)
+B
R ch
AUX IN
Q401
MUTING
XO
X3
X1
X2
INPUT
(CD SIGNAL)
CONTROL
CIRCUIT
Q403
BUFFER
AMP
CXA1898QT6
IC302
R/P EQ AMP
Q102
SWITCHING
(PLAY:ON)
AGC
A
B
C
Q603,613
MODE
SELECT
SHIFT
REGISTER
LATCH
P.B EQ
CONT.
REC EQ
CONT.
MUTE
S953
S957
Q317
Q316
MOTOR SPEED
CONTROL
Q304,307
BIAS OSC
CONTROL
(CrO2)
Q314,
Q318
MOTOR
DRIVE
Q315
MOTOR
SPEED
CONT.
Q313
MOTOR
SPEED
CONT.
Q312,
Q319
MOTOR
DRIVE
Q308-311,
Q323,324
SOLENOID
DRIVE
D301
D302
VR303
(TAPE
SPEED
ADJ.)
VR301,
VR302
(TAPE
SPEED
ADJ.)
D951
D971
SOLENOID
(DECK1)
SOLENOID
(DECK2)
M
MOTOR
(DECK1)
MOTOR
(DECK2)
+B
(5)
Q802
Q801
X801
X802
MBP2
OSC2
OSC1
XO
XI
MBP1
MKLATCH
MKCLK
MKDATA
REMOCN IN
RST
ADIN3
ADIN2
ADIN1
ADIN0
Q609
(1)
POWER DOWN
DET. (Vcc)
KEY MATRIX
S801-814,1001-1014
Z1001
(REMOTE
SENSOR)
(3)
S-806H-Z
IC801
RESET
(2)


MIX MIC
CERAMIC SPEAKER 1.4cm (TWEETER)
PM DYNAMIC SPEAKER 10cm, 2.7Ω (WOOFER)
HEADPHONES
R ch
R ch
BH3854FSEI
IC606
ASP
AN7135
IC607
POWER AMP
MATRIX, SURROUND
VOLUME
VOLUME
VREF
TONE
(BASS)
(TREBLE)
CONTROL
20K
20K
A B C
Q404 MUTING
RIPPLE FILTER/ STABILIZER
D627
+B (4)
+B (1)
Q605
MUTING CONT.
TA7291S
IC790
LOADING MOTOR (CD)
LOADING MOTOR (CD)
+B (7)
XRA6418N
IC1301
LOADING MOTOR (T.P)
LOADING MOTOR (TOP PANEL)
LOGIC CONT.
+B (7)
A B C
COBRA CL
COBRA OP
CD TRAY CL
CD TRAY OP
A6CLK
A6DATA
A6LATCH
MUTE.A
SEG33
SEG0
COM0
COM3
LCD DISPLAY
LED801

● CD Unit


OPTICAL PICKUP
SEMICONDUCTOR LASER
PHOTO DETECTOR
RF AMP
Q701
LASER POWER DRIVE
AN8802SCE IV
IC701
SERVO AMP
RF EQ
AGC
LEVEL CLIPPER
H.P.F. (B.P.F.)
DETECTOR
H.P.F. AMP
BDO DETECTOR
H.P.F.
RF DETECTOR
VCA
VCPS
COMP
PHASE COMPARATOR
PHASE DEFFERENCE LIMITER
D/A L.P.F.
AN8389SEI
IC703
FOCUS COIL / TRACKING COIL / TRAVERSE MOTOR / SPINDLE MOTOR DRIVE
RESET SIGNAL GENERATOR
FOCUS COIL DRIVE
TRACKING COIL DRIVE
TRAVERSE MOTOR DRIVE
SPINDLE MOTOR DRIVE
FOCUS COIL
TRACKING COIL
TRAVERSE MOTOR
SPINDLE MOTOR
LPD
LD
LD ON
AMPO
AMPI
PDAD
PDA
PDBD
PDB
FBAL
TBAL
GND
VREF
Vcc
ENV
ARF
BDO
/RF DET
FE
TES
WVEL
PLAY
OFTR
TE
CROSS
TEBPF
VDET
NRESET
PVcc1
PVcc2
PGND1
PGND2
Vref
(CD2)
(CD1)
+B



Note :

→ : CD DIGITAL / ANALOG SIGNAL LINE

■ Self-Diagnostic Display Function

Display procedure

To view the display

- **To change from normal display mode to self-diagnostic mode:**
  1. Connect the unit to the power supply and switch on the power.
  2. Set the reverse mode to " ⇄ ". Use the remote control; reverse mode cannot be set from the unit controls.
  3. Confirm that there is no tape cassette in either tape deck 1 or tape deck 2.
  4. Press and hold the tape deck stop button, and then also press and hold the FF/TPS button for about 2 seconds (without releasing the tape deck stop button). A beeping sound is heard and "T" is displayed (indicating the unit has changed from normal display mode to self-diagnostic mode.)
- **To view the self-diagnostic display for tape decks 1 and 2:**
  1. Load a tape cassette with both erasure-prevention tabs removed into tape deck 1.
  2. Press the FF/TPS button and fast-forward the tape for about 5 seconds, then press the tape stop button (□).
  3. Remove the tape cassette and load a music cassette (with at least 4 seconds of music recorded on it and both erasure-prevention tabs intact).
  4. Press the play button (◁ ▷). When play begins, press either the FF/TPS button or the REW/TPS button to use the TPS (tape program search) function in the direction in which the music is recorded.
  5. When TPS functions (the beginning of the music is found and the unit changes to the play mode), press the tape deck stop button (□) to stop the tape.
  6. Repeat steps 1 to 5 above for tape deck 2.
  7. When the tape deck stop button (□) is pressed, if there is a fault, the LCD shows the self-diagnostic display. (If there is no fault, the LCD shows the tape counter.)
     If there is more than one fault, the display changes each time the tape deck stop button (□) is pressed.
     To change between the self-diagnostic display for tape deck 1 and tape deck 2, press the tape deck select button (DECK 1/2).
- **To view the self-diagnostic display for the CD player:**
  1. Press the CD stop button (□ /CLEAR) to select CD operation.
  2. Press the CD tray open/close button (⏏) to open the CD tray.
  3. After the CD tray is fully open for about 5 seconds, press the CD tray open /close button (⏏) to close the tray.
  4. Press the tape deck stop button (□). If there is fault, the LCD shows the self-diagnostic display. (If there is no fault , the LCD shows the tape counter.)

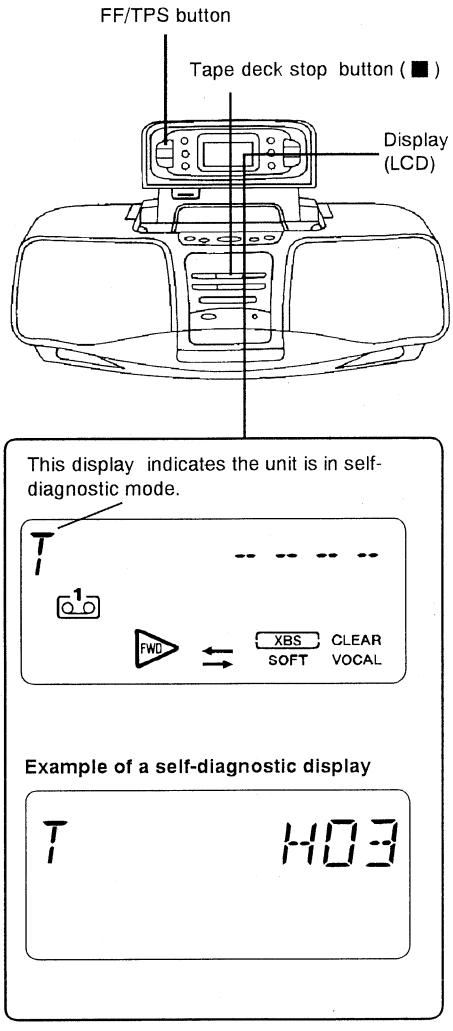
  Note: When procedures for tape decks 1 and 2 and the CD player are performed, if there is a fault, the LCD alternates between the self-diagnostic display for tape decks 1 and 2 and the CD player each time the tape deck stop button (□) is pressed. (If there is no fault, the LCD shows the tape counter.)

To return to the normal display mode

- Press the power switch (POWER) once to switch off the power, then press it again to switch the power back on. To view the self-diagnostic display once again, perform steps 1 to 4 from "To change from normal display mode to self-diagnostic mode" above, and then press the tape deck stop button (□).

Note: The contents of the self-diagnostic display are stored in memory. To clear the memory after the fault has been corrected, remove the batteries (including the clock/memory battery), disconnect the AC power supply, and then press and hold the power switch (POWER) for at least 5 seconds.

Display location



Example of a self-diagnostic display

Display contents

Note: Items marked with (∗) mark are displayed automatically and do not require the procedure described under "To change from normal display mode to self-diagnostic mode:".)

Display code	Symptom or condition	Cause and method of correction
∗ U1	When operating on batteries, the power switches off immediately after being switched on.	The batteries are depleted; replace with new batteries.
∗ U02	Power cannot be switched on.	Check the power cord (AC) or insert batteries (DC).
∗ H01	The cassette deck does not operate correctly. Example: The tape deck operates in reverse-play mode when the forward-play button is pressed.	Faulty cassette deck mechanism mode switch and plunger. (Check and replace.)
H02	No sound output; or the unit goes into recording mode even when the erasure-prevention tabs are removed from the cassette.	Faulty erasure-prevention tab detection switch or a short-circuit. (Check and replace.)
H03	The tape does not play when the tape deck play button is pressed. The motor operates when the tape deck play button is pressed; even when no cassette is loaded in the deck.	Faulty cassette detection switch or a short-circuit. (Check and replace.)
H15	The CD tray closes immediately after it is opened.	Faulty contact on the CD tray open detection switch. (Check and replace.)
H16	The CD tray opens immediately after it is closed.	Faulty contact on the CD close detection switch. (Check and replace.)
F01	When the tape play button is pressed, the tape advances slightly and then stops.	Faulty reel pulse (Hall) IC. (Check and replace.)
F02	The TPS function won't operate.	Faulty signal detection or faulty plunger control. (Check and replace the mechanism control IC.)
F15	When the CD play button is pressed from either the power off state or from some function other than CD, excessive time (more than 5 seconds) is required to begin CD play.	Faulty traverse inner circumference position detection switch. (Check and replace.)
F75	When a CD is loaded, "NO DISC" is displayed and the CD cannot be played.	Faulty CD circuit power supply (power supply IC or CD circuit power supply system). (Check and replace.) Flexible circuit board disconnected or broken wiring. (Check and replace.) Faulty servo processor IC. (Check and replace.)

■ Measurements and Adjustments

< TUNER SECTION >

• ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
• Set power source voltage to 15 V DC. • Set power switch to ON. • Set function switch to TUNER / MW, LW or FM.	• Set volume level to 40. • Output of signal generator should be no higher than necessary to obtain an output reading.

• MW-RF ALIGNMENT

(The parts other than the ones listed below are aligned at the factory before they are supplied. Therefore, alignment of those parts is unnecessary when used for replacement.)

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Refer to Fig. 2)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	594 kHz	Tune to signal	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig.1 and then connect the lead wires of the plug to the measuring instrument.)	(*1) L3-1 (MW ANT Coil)	Adjust for maximum output. Adjust L2-1 by moving coil along the ferrite core.
〃	1503 kHz	〃	〃	CT1 (MW ANT Trimmer)	Adjust for maximum output.

(*1) Fix antenna coil with wax after completing alignment.

• LW-RF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Refer to Fig. 2)	REMARKS
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate a signal into the loop ant. of receiver.	153 kHz	Tune to signal	Headphones Jack (32Ω) (Fabricate the plug as shown in Fig.1 and then connect the lead wires of the plug to the measuring instrument.)	(*2) L3-2 (LW ANT Coil)	Adjust for maximum output. Adjust L2-2 by moving coil along the ferrite core.
〃	270 kHz	〃	〃	CT2 (LW ANT Trimmer)	Adjust for maximum output.

(*2) Fix antenna coil with wax after completing alignment.

< CASSETTE DECK SECTION >

• ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT	
• Set power source voltage to 15 V DC. • Set power switch to ON.	• Set function switch to TAPE. • Set volume control to 40.

• HEAD AZIMUTH ALIGNMENT

TEST TAPE	INDICATOR ELECTRONIC VOLTMETER or OSCILLOSCOPE	ADJUSTMENT	SPECIFICATION	REMARKS
QZZCFM (8 kHz, – 20 dB)	Headphones Jack (32Ω) (Fabricate the plug shown in Fig.1 and then connect the lead wires of the plug to the measuring instrument.)	Azimuth Screw (Shown in Fig. 3, 4.)	Maximum output	1. Insert the test tape (QZZCFM) and start playback in the forward direction. 2. Adjust the azimuth screw for maximum waveform on the oscilloscope and the similar output on L and R channels. 3. When adjusting the azimuth in the reverse direction, repeat the adjustment a several times because of a little slip on the forward direction side.

Caution:

- Please replace both azimuth adjustment screws (RHE5152ZB) and springs (RMB0331) used for the forward and reverse sides to new ones simultaneously when readjusting the head azimuth. (Shown in Fig. 3, 4.)
  Even if you wish to readjust the head azimuth without replacing the screws and springs, a fine adjustment can not be done because of the screw-locking bond adhered to the azimuth screw and spring.
- Please remove the screw-locking bond left on the head base when replacing the azimuth screw.
- If you wish to readjust the head azimuth, be sure to adjust with adhering the cassette tape closely to the mechanism by pushing the center of cassette tape with your finger. (Shown in Fig. 5.)
- After the adjustment, apply screwlock to the azimuth adjusting screw. (Screw-locking bond: RZZ0L01)

• TAPE SPEED ALIGNMENT

TEST TAPE	INDICATOR (FREQUENCY COUNTER)	ADJUSTMENT	REMARKS
QZZCWAT (3 kHz, -10 dB)	Headphones Jack (32Ω) Fabricate the plug shown in Fig.1 and then connect the lead wires of the plug to the measuring instrument.	DECK2 HIGH SPEED ..... VR301 DECK1 NORMAL SPEED ..... VR303 DECK2 NORMAL SPEED ..... VR302 (Shown in Fig. 6.)	**NORMAL SPEED ADJUSTMENT (DECK1)** (Specification : 3000 ± 40 Hz) 1. Insert a test tape (QZZCWAT) in DECK1 and start playback in forward direction. 2. Adjust VR303 until the frequency is set to 3000 ± 20 Hz on the frequency counter. 3. Check that the frequency is set to within ± 40 Hz for playback in forward direction after playback in reverse direction. **HIGH SPEED ADJUSTMENT (DECK2)** (Specification : F ± 40 Hz) 4. Short the test point TP1 and TP2 to set the high speed mode. 5. Insert a test tape (QZZCWAT) in DECK1 and start playback in forward direction. • This frequency is defined as F. 6. Insert a test tape (QZZCWAT) in DECK2 and start playback in forward direction. 7. Adjust VR301 until the frequency is set to F ± 40 Hz. 8. Open the test point TP1 and TP2 to set the normal speed mode. **NORMAL SPEED ADJUSTMENT (DECK2)** 9. Insert a test tape (QZZCWAT) in DECK2 and start playback in forward direction. 10. Adjust VR302 until the frequency is set to 3000 ± 20 Hz on the frequency counter. 11. Check that the frequency is set to within ± 40 Hz for playback in forward direction after playback in reverse direction.

• RECORD BIAS CHECK

TEST TAPE	INDICATOR ELECTRONIC VOLTMETER or OSCILLOSCOPE	ADJUSTMENT	SPECIFICATION	REMARKS
Use CrO_2 tape and Normal tape	TP6 ..... (+) TP4 ..... (–) (Shown in Fig. 6, 7.)	——	CrO2 ..... 0.5~24.5 mV Normal ..... 13.5~16.5 mV	• Record mode

• ALIGNMENT POINTS

- Please refer to Printed Circuit Board Diagram for test point locations.

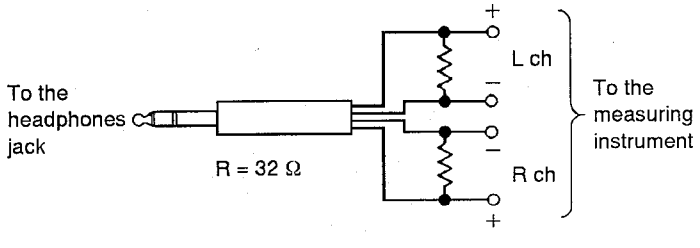


Fig. 1

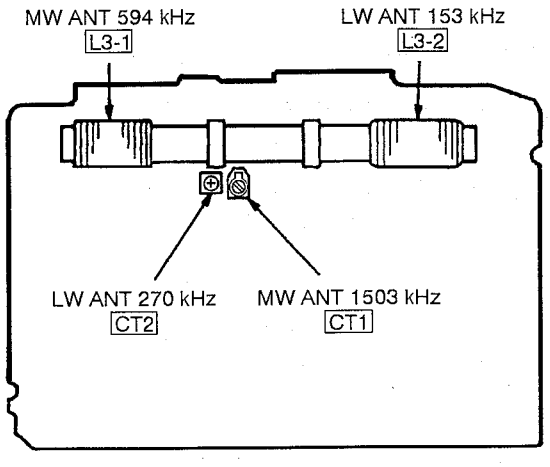


Fig. 2

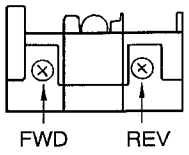


Fig. 3

Fig. 4

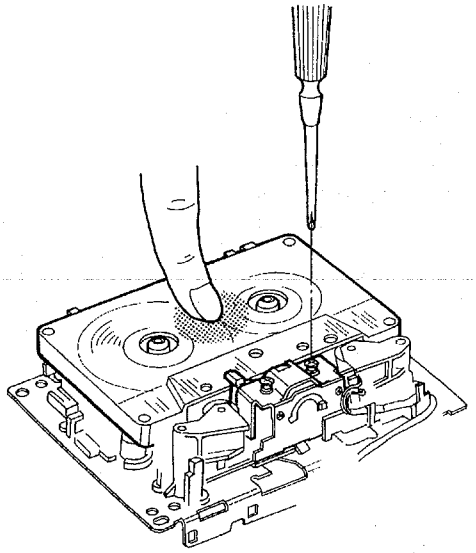


Fig. 5

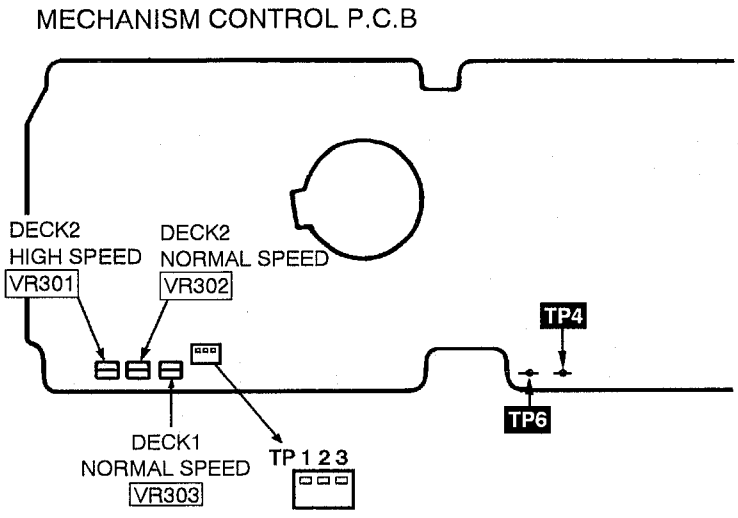
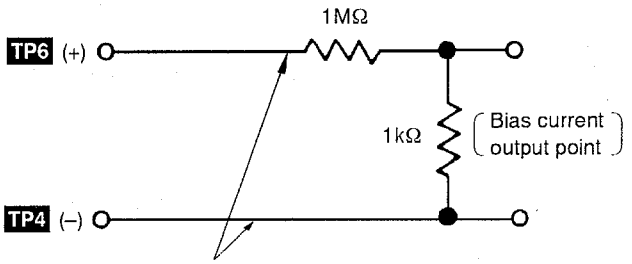


Fig. 6



Keep these cords short. (Line capacitance: 3 pF of less)

- In order not to influence the bias oscillation, divide the voltage with 1 MΩ and 1 kΩ resistors, and measure the voltage across the 1 kΩ resistor.

Fig. 7

< CD SECTION >

Caution:
It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.)
With the unit turned "on", laser radiation is emitted from the pickup lens.
Avoid exposure to the laser beam, especially when performing adjustments.

• Preparation for Adjustment

1. Set up the unit following the procedure described in "Checking for the main P.C.B. and CD P.C.B.". (See page 9)
2. After completing the setup procedure, switch the unit off then switch it on again (to adjust the unit with the CD unit placed in an upright position).

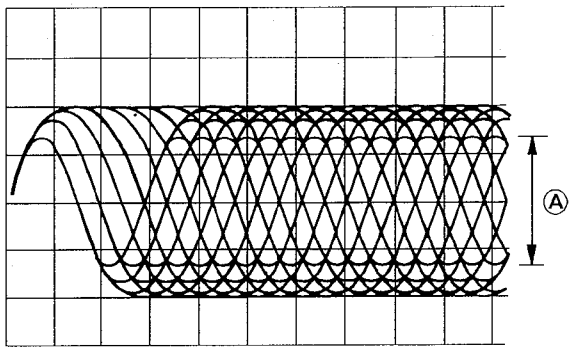
Measuring Instruments and Special Tools

- Test disc
  1. Playability test disc (SZZP1054C)
  2. Uneven test disc (SZZP1056C)
- Hexagonal wrench (M2.0) (SZZP1101C)
- Oscilloscope

(1) MECHANICAL ADJUSTMENT

- When the traverse deck is replaced, making adjustments is not necessary. (The traverse deck ass'y is already adjusted.)
- Make adjustments to improve playability when the traverse deck has not been replaced. Make the electrical adjustments first.

1. Connect the oscilloscope's CH. 1 probe across **TJ701** (+) and **TJ702** (VREF) on the CD P.C.B.
   Oscilloscope setting:
   VOLT ..... 200 mV
   SWEEP ..... 0.5 μsec
   Input coupling ..... AC
2. Switch the player power ON, and play track 19 on the test disc (SZZP1056C).
3. Leave the player in Play mode and place it as shown in the figure on the right.
4. Alternately adjust the two mechanical adjusting screws with the 2.0 mm allen wrench (SZZP1101C) until the RF signal amplitude on the oscilloscope is maximize. (Shown in Fig. 9)
5. After completing the adjustment, lock the mechanical adjustments with lock paint (RZZ0L01).



Ⓐ **Maximize the amplitude.**

• NEW DIGITAL SERVO CIRCUIT

A digital servo circuit employed in this unit is a new type circuit. All adjustment VRs, which are equipped with conventional digital servo circuits, are removed from the electric section. Therefore, only mechanical adjustments are necessary.

(2) CHECK OF PLAY OPERATION AFTER ADJUSTMENT

- Checking Skip Search
  1. Play an ordinary musical program disc.
  2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).
- Checking Manual Search
  1. Play an ordinary musical program disc.
  2. Press the manual search button to check for smooth manual search operations at either low or high speed (in both the forward and reverse directions).
- Checking playability
  1. Play the 0.7 mm black dot and the 0.7 mm wedge on the test disc (SZZP1054C) and verify that no sound skip or noise occurs.
  2. Play the middle tracks of the uneven test disc and verify that no sound skip or noise occurs.

• Locations of Adjustments

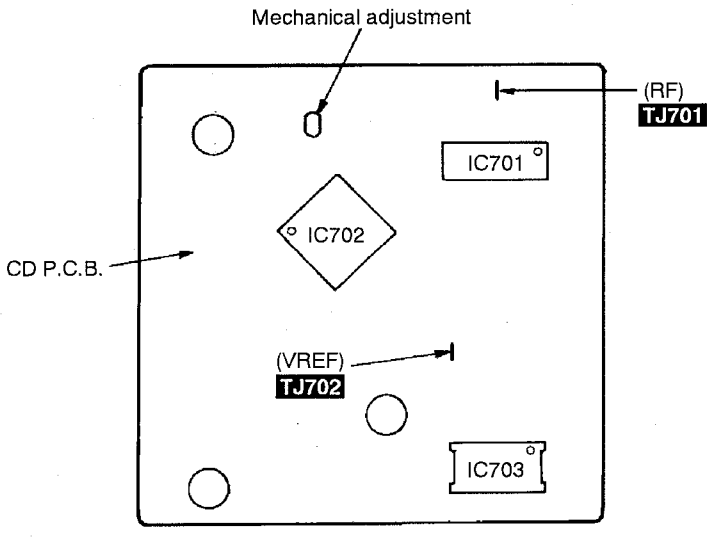
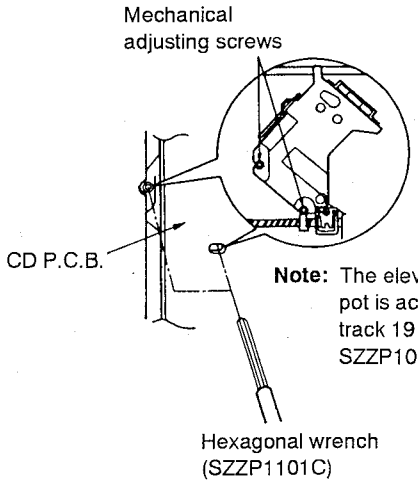


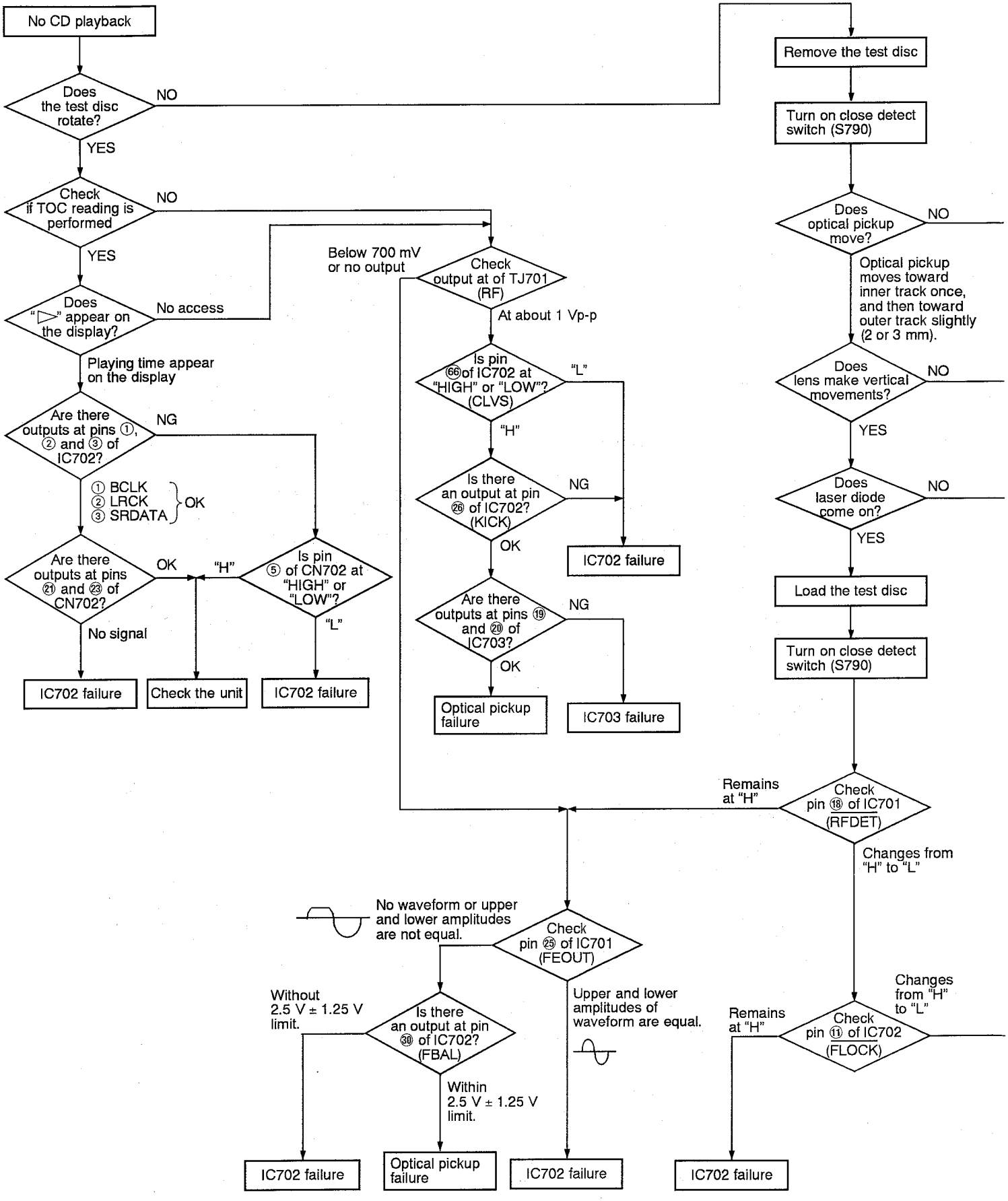
Fig. 8

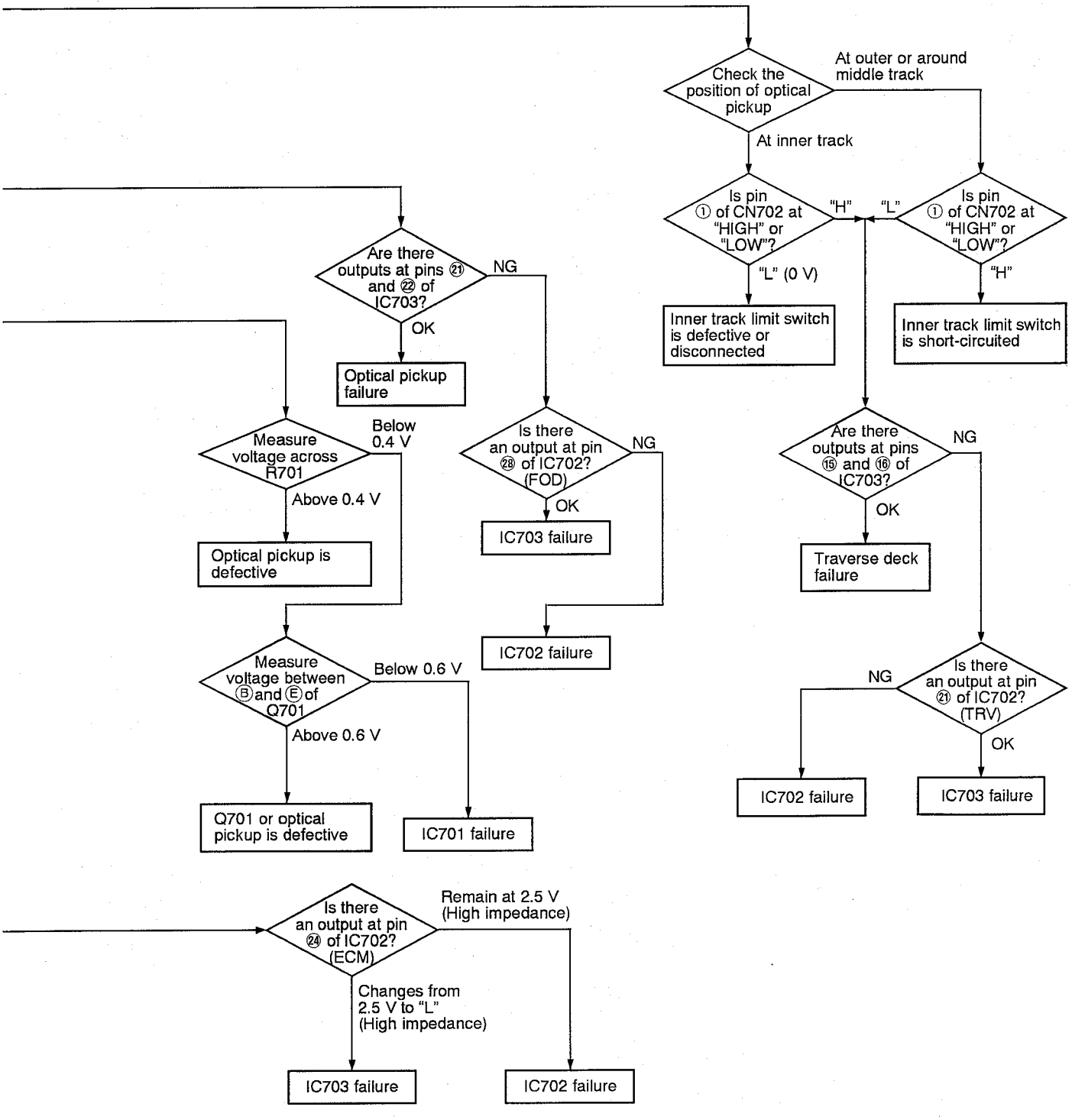


Note: The elevation angle adjusting pot is accessible only after track 19 on the test disc, SZZP1056C, has been played.

Fig. 9

■ Troubleshooting Guide


No CD playback
Does the test disc rotate?
NO
YES
Check if TOC reading is performed
NO
YES
Does "▷" appear on the display?
No access
Playing time appear on the display
Are there outputs at pins ①, ② and ③ of IC702?
NG
① BCLK
② LRCK
③ SRDATA
OK
Are there outputs at pins ㉑ and ㉓ of CN702?
OK
"H"
Is pin ⑤ of CN702 at "HIGH" or "LOW"?
"L"
No signal
IC702 failure
Check the unit
IC702 failure
Below 700 mV or no output
Check output at of TJ701 (RF)
At about 1 Vp-p
Is pin ㊻ of IC702 at "HIGH" or "LOW"? (CLVS)
"L"
"H"
Is there an output at pin ㉖ of IC702? (KICK)
NG
OK
IC702 failure
Are there outputs at pins ⑲ and ⑳ of IC703?
NG
OK
Optical pickup failure
IC703 failure
Remove the test disc
Turn on close detect switch (S790)
Does optical pickup move?
NO
Optical pickup moves toward inner track once, and then toward outer track slightly (2 or 3 mm).
Does lens make vertical movements?
NO
YES
Does laser diode come on?
NO
YES
Load the test disc
Turn on close detect switch (S790)
Remains at "H"
Check pin ⑱ of IC701 (RFDET)
Changes from "H" to "L"
No waveform or upper and lower amplitudes are not equal.
Check pin ㉕ of IC701 (FEOUT)
Upper and lower amplitudes of waveform are equal.
Without 2.5 V ± 1.25 V limit.
Is there an output at pin ㉚ of IC702? (FBAL)
Within 2.5 V ± 1.25 V limit.
IC702 failure
Optical pickup failure
IC702 failure
Remains at "H"
Check pin ⑪ of IC702 (FLOCK)
Changes from "H" to "L"
IC702 failure


Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"H"
"L"
Is pin ① of CN702 at "HIGH" or "LOW"?
"L" (0 V)
"H"
Inner track limit switch is defective or disconnected
Inner track limit switch is short-circuited
Are there outputs at pins ㉑ and ㉒ of IC703?
NG
OK
Optical pickup failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup is defective
Is there an output at pin ㉘ of IC702? (FOD)
NG
OK
IC703 failure
IC702 failure
Are there outputs at pins ⑮ and ⑯ of IC703?
NG
OK
Traverse deck failure
Measure voltage between Ⓑ and Ⓔ of Q701
Below 0.6 V
Above 0.6 V
Q701 or optical pickup is defective
IC701 failure
Is there an output at pin ㉑ of IC702? (TRV)
NG
OK
IC702 failure
IC703 failure
Is there an output at pin ㉔ of IC702? (ECM)
Remain at 2.5 V (High impedance)
Changes from 2.5 V to "L" (High impedance)
IC703 failure
IC702 failure

■ Function of IC Terminals

•IC701 (AN8802SCE1V)

Pin No.	Terminal Name	I/O	Function
1	PDAD	I	PD A channel signal input with delay
2	PDA	I	PD A channel signal input without delay
3	LPD	I	Laser PD connection
4	LD	O	Power supply for LD driving
5	AMPI	I	RF amplifier input
6	Vcc	I	Power supply connection
7	AMPO	O	RF amplifier output (no use, open)
8	CAGC	I	AGC loop filter connection
9	ARF	O	RF AGC output
10	CENV	I	Capacitor connection for RF detection
11	CEA	I	Capacitor connection for HPF amplifier
12	GND	—	Ground connection
13	LDON	I	ON/OFF input of LD APC ("H": ON, "L": OFF)
14	TES	I	Tracking error shunt signal input ("H": shunt)
15	PLAY	I	Play signal input ("H": PLAY)
16	WVEL	I	WVEL control
17	BDO	O	BDO output
18	/RFDET	O	NRFDET output
19	CROSS	O	CROSS output
20	OFTR	O	OFTR output
21	VDET	O	VDET output
22	ENV	O	ENV output
23	TEBPF	I	Vibration detection input
24	TE	O	Tracking error output
25	FE	O	Focus error output
26	PTO	O	Potentioamplifier output (no use, open)
27	PTI	I	Potentioamplifier inversion input (no use, open)
28	TBAL	I	Tracking balance input
29	FBAL	I	Focus balance input
30	VREF	O	VREF output
31	PDB	I	PD B channel signal input without delay
32	PDBD	I	PD B channel signal input with delay

•IC702 (MN66271RA)

Pin No.	Terminal Name	I/O	Function
1	BCLK	O	Bit clock output for serial data (no used, open)
2	LRCK	O	L/R identification signal output (no use, open)
3	SRDATA	O	Serial data output (no used, open)
4	$DV_{DD}1$	I	Power supply input (for digital circuit)
5	DVss1	—	GND (for digital circuit)
6	TX	O	Digital audio interface signal output
7	MCLK	I	Microprocessor command clock signal input (Latches data at first transition)
8	MDATA	I	Microprocessor command data signal input
9	MLD	I	Microprocessor command load signal input
10	SENSE	O	Sence signal output (OFT, FESL, MAGEND, NAJEND, POSAD, SFG)
11	/FLOCK	O	Focus servo feeding signal output ("L": Feed)
12	/TLOCK	O	Tracking servo feeding signal output ("L": Feed)
13	BLKCK	O	Sub-code block clock signal output (fBLKCK=75 Hz during normal playback)
14	SQCK	I	External clock signal input for sub-code Q register
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input ("H": Mute)
17	STAT	O	Status signal output (CRC, CUE, CLVS, TTSTVP, FCLV, SQCK)
18	/RST	I	Reset input
19	SMCK	O	1/2-divided clock signal of crystal oscillating at MSEL="H" (fSMCK=8.4672 MHz) 1/4-divided clock signal of crystal oscillating at MSEL="L" (fSMCK=4.2336 MHz)
20	PMCK	O	1/192-divided clock signal of crystal oscillating (fPMCK=88.2 KHz) (no use, open)
21	TRV	O	Traverse forced feed output
22	TVD	O	Traverse drive output
23	PC	O	Spindle motor ON signal output ("L": ON)
24	ECM	O	Spindle motor drive signal output (forced mode output)
25	ECS	O	Spindle motor drive signal output (servo error signal output)
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output

Pin No.	Terminal Name	I/O	Function
29	VREF	I	D/A (drive) output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference voltage input
30	FBAL	I	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input
35	VDET	I	Vibration detection signal input ("H": detection)
36	OFT	I	Off-track signal input ("H": off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detection signal input ("L": detection)
39	BDO	I	Dropout signal input ("H": Dropout)
40	LDON	O	Laser on signal output ("H": ON)
41	TES	O	Tracking error shunt signal output ("H": shunt)
42	PLAY	O	Play signal out ("H": PLAY)
43	WVEL	O	Double speed status signal output ("H": Double speed)
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	—	DSL bias (no use, open)
47	DSLF	I/O	DSL loop filter
48	PLLF	I/O	PLL loop filter
49	VCOF	—	VCO loop filter (no use, open)
50	AVDD2	I	Power supply input (for analog circuit)
51	AVSS2	—	GND (for analog circuit)
52	EFM	—	EFM signal output (not use, open)
53	PCK	—	PLL extraction clock output (fPCK=4.321 MHz during normal playback) (no use, open)
54	PDO	—	Phase comparison signal of EFM and PCK signals (no use, open)
55	SUBC	—	Sub-code serial data output (no use, open)
56	SBCK	I	Clock input for sub-code serial data (no use, GND)
57	Vss	—	GND
58	X1	I	Crystal oscillating circuit input (f=16.9344 MHz)
59	X2	O	Crystal oscillation circuit output (f=16.9344 MHz)
60	VDD	I	Power supply input (for oscillating circuit)
61	BYTCK	—	Byte clock output (no use, open)
62	/CLDCK	—	Sub-code frame clock signal output (fCLDCK=7.35 kHz during normal playback) (no use, open)
63	FCLK	—	Crystal frame clock signal output (fFCLK=7.35 kHz, double=14.7 kHz)
64	PFLAG	—	Interpolation flag output ("H": Interpolation) (no use, open)
65	FLAG	—	Flage output (no use, open)
66	CLVS	—	Spindle servo phase synchronizing signal output ("H": CLV, "L": rough servo) (no use, open)
67	CRC	—	Sub-code CRC checked output ("H": OK, "L": NG) (no use, open)
68	DEMPH	—	De-emphasis ON signal output ("H": ON) (no use, open)
69	RESY	—	Frame resynchronizing signal output (no use, open)
70	/RST2	I	Reset input through MASH circuit ("L": Reset)
71	/TEST	I	Test input
72	AVDD1	I	Power supply input (for analog circuit)
73	OUTL	O	Left channel audio signal output
74	AVSS1	—	GND
75	OUTR	O	Right channel audio signal output
76	RSEL	I	RF signal polarity assignment input (at "H" level, RSEL="H"; at "L" level, RSEL=L)
77	CSEL	I	Crystal oscillating frequency designation input ("L": 16.9344 MHz, "H": 33/8688 MHz)
78	PSEL	—	Test input (normally, "L") (no use, GND)
79	MSEL	—	Output frequency switching for SMCK terminal "H": SMCK=8.4672 MHz "L": SMCK=4.2336 MHz (no use, GND)
80	SSEL	I	Output mode switching of SUBQ terminal ("H": Q code buffer mode)

● IC802 (MND3256REBA1)

Pin No.	Terminal Name	I/O	Function
1	VDD	I	Power supply input (+5 V)
2	OSC1	O	6.0 MHz clock output
3	OSC2	I	6.0 MHz clock input
4	VSS	—	GND
5	X1	I	32 kHz clock input
6	X0	O	32 kHz clock output
7	VREF –	—	AD converter reference voltage (GND)
8	ADIN7	I	AD converter signal input (REC INH F/REC INH R/TPS)
9	ADIN6	I	AD converter signal input (DECK 2: HALF SW /MODE SW/REEL PULSE)
10	ADIN5	I	AD converter signal input (DECK 1: HALF SW /MODE SW/REEL PULSE)
11	ADIN4	I	AD converter signal input (CD TRAY OPEN CLOSE SW)
12	ADIN3	I	AD converter signal input (Power "on" detect)
13	ADIN2	I	AD converter signal input (Operation SW)
14	ADIN1	I	AD converter signal input (Operation SW)
15	ADIN0	I	AD converter signal input (Operation SW)
16	VREF +	—	AD converter reference voltage (VDD)
17	MBP2	O	Beat proof control signal output
18	MBP1	O	Beat proof control signal output
19	BEEP	O	Beep signal output
20	MKLATCH	O	Deck control data latch signal output
21	MKDATA	O	Deck control data output
22	MKCLK	O	Deck control clock output
23	AGCLK	O	Serial clock output (for ASP)
24	AGDATA	O	Serial data output (for ASP)
25	AGLATCH	O	Latch signal output (for ASP)
26	PW CONT.	O	Power supply circuit control (H: Power ON)
27	MUT. A	O	Muting control signal output
28	PLL CE	O	PLL tuner strobe signal output
29	PLL CL	O	PLL tuner clock output
30	PLL DI	O	PLL tuner control data signal output

Pin No.	Terminal Name	I/O	Function
31	REMOCON IN	I	Remote control signal input
32	BLKCK	I	Sub code block clock input
33	STATUS	I	CD status signal input
34	CD RESET	I	CD reset signal input (L: RESET)
35	RST	I	System reset signal input (L: RESET)
36	MLD	O	CD signal process strobe signal output
37	MDATA	O	CD signal process data output
38	MCLK	O	CD signal process clock signal output
39	SQCK	O	CD sub-code reading clock output
40	SUBQ	I	CD sub-code data input
41	ES3	I	———
42	SYNC	—	———
43	CM	I	1-chip microprocessor mode setting input (L: 1-chip)
44	TLOCK/ TUNE	I	CD tracking clock signal input/tuner receiving signal input
45	FLOCK/ST	I	CD focus lock signal input/tuner stereo signal input
46	REST	I	CD traverse position detection switch signal input (H: most inside position)
47	ES1	I	———
48	ES2	I	———
49	SENSE	I	CD sense signal input (H: Detect)
50	REMOCON STANDBY	I	Remote control sensor power control (H: ON, 4 MHz)
51	NC	—	———
52	CD TRAY OP	I	CD tray open detection switch signal input
53	CD TRAY CL	I	CD tray close detection switch signal input
54	COBRA CL	O	Top panel close signal output
55	COBRA OP	O	Top panel open signal output
56~ 59	NC	—	———
60~ 93	SEG33~ SEG0	O	LCD segment signal output
94~ 97	COM3~ COM0	O	LCD common signal output
98~ 100	VLC3~ VLC1	I	LCD bias reference voltage input

●IC703 (AN8389SE1)

Pin No.	Terminal Name	I/O	Function
1	Vcc	I	Power supply
2	VREF	I	VREF input
3	IN4	I	Motor driver (4) input
4	IN3	I	Motor driver (3) input
5	GND	—	Ground connection
6	NC	—	No connection
7	NRESET	I	Reset input
8	GND	—	Ground connection
9	IN2	I	Motor driver (2) input
10	PC2	I	PC2 (power cut) input
11	IN1	I	Motor driver (1) input
12	PC1	I	PC1 (power cut) input (no use, GND)
13	PVCC1	I	Power supply (1) for driver
14	PGND1	—	Ground connection (1) for driver
15	D1−	O	Motor driver (1) reverse-action output
16	D1+	O	Motor driver (1) forward-action output
17	D2−	O	Motor driver (2) reverse-action output
18	D2+	O	Motor driver (2) forward-action output
19	D3−	O	Motor driver (3) reverse-action output
20	D3+	O	Motor driver (3) forward-action output
21	D4−	O	Motor driver (4) reverse-action output
22	D4+	O	Motor driver (4) forward-action output
23	PGND2	—	Ground connection (2) for driver
24	PVCC2	I	Power supply (2) for driver

■ Replacement Parts List

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*Remote Control Ass'y: Supply period for three years from termination of production.
*Warning: This product uses a laser diode. Refer to caution statements on page 2.
*<VRD>: indicates parts that are supplied by Video Recorder Division.
*The "(SF)" mark denotes the standard part.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC1	TA7358FMATEL	I. C, FM FRONT END	
IC2	XLU2616F-E1	I. C, PLL FREQ. SYNTESIZER	
IC3	LA1832MS-TEL	I. C, FM/AM IF AMP. DET	
IC301	BA7755A	I. C, R/P SELECT	
IC302	CXA1898QT6	I. C, R/P EQ AMP.	
IC601	TA2011S	I. C, MIC AMP.	
IC602	MC14052BFR2	I. C, INPUT SELECTOR	
IC604	S81350HGZ	I. C, REGULATOR	⚠
IC605	LA5610N	I. C, POWER SUPPLY CONT	⚠
IC606	BH3854FSE1	I. C, ASP	
IC607	AN7135	I. C, POWER AMP	
IC701	AN8802SCE1V	I. C, SERVO AMP	
IC702	MN66271RA	I. C, SERVO PROCESSOR	
IC703	AN8389SE1	I. C, COIL/MOTOR DRIVE	
IC790	TA7291S	I. C, MOTOR DRIVE	
IC801	S-806H-Z	I. C, RESET	
IC802	MND3256REBA1	I. C, SYSTEM CONT. /LCD DRIVE	
IC951	DN6851ALB	I. C, HALL	
IC971	DN6851ALB	I. C, HALL	
IC1301	XRA6418N	I. C, MOTOR DRIVE	
		TRANSISTOR(S)	
Q1, 2	2SC3311R	TRANSISTOR	
Q3	2SC2786LTA	TRANSISTOR	
Q4	2SC3313B	TRANSISTOR	
Q5	UN411FTA	TRANSISTOR	
Q8	2SC3311R	TRANSISTOR	
Q10	UN411FTA	TRANSISTOR	
Q11	2SD1450RTA	TRANSISTOR	
Q12	2SC3311R	TRANSISTOR	
Q14	2SC3311R	TRANSISTOR	
Q101	2SJ40CTA	TRANSISTOR	
Q102	2SJ40CDTA	TRANSISTOR	
Q103	2SJ40DTA	TRANSISTOR	
Q201	2SJ40CTA	TRANSISTOR	
Q202	2SJ40CDTA	TRANSISTOR	
Q203	2SJ40DTA	TRANSISTOR	
Q301, 302	2SC2389SSTA	TRANSISTOR	
Q303	2SD1450RTA	TRANSISTOR	
Q304	UN5210TX	TRANSISTOR	
Q305, 306	2SC3311R	TRANSISTOR	
Q307	2SD1819RTX	TRANSISTOR	
Q308, 309	2SB1030QRSTA	TRANSISTOR	
Q310, 311	2SD1819RTX	TRANSISTOR	
Q312	2SD965Q	TRANSISTOR	
Q313	2SK381BCDTA	TRANSISTOR	
Q314	2SD965Q	TRANSISTOR	
Q315	2SK381BCDTA	TRANSISTOR	
Q316	2SD1819RTX	TRANSISTOR	
Q317-319	UN5114TX	TRANSISTOR	
Q320-326	2SD1819RTX	TRANSISTOR	
Q401	2SC3311R	TRANSISTOR	
Q403	2SC3312RTA	TRANSISTOR	
Q404	2SD1450RTA	TRANSISTOR	
Q501	2SC3311R	TRANSISTOR	
Q503	2SC3312RTA	TRANSISTOR	
Q504	2SD1450RTA	TRANSISTOR	
Q602	UN421FTA	TRANSISTOR	
Q603	UN4210-S	TRANSISTOR	
Q605	UN411FTA	TRANSISTOR	
Q607	UN411FTA	TRANSISTOR	
Q608	UN4210-S	TRANSISTOR	
Q609	2SC3311AIRTA	TRANSISTOR	
Q610	2SC3311AIRTA	TRANSISTOR	⚠
Q611	UN4213	TRANSISTOR	
Q612	UN4111	TRANSISTOR	
Q613	UN4210-S	TRANSISTOR	
Q616	UN411FTA	TRANSISTOR	
Q617	2SC3311AIRTA	TRANSISTOR	
Q701	2SB709S	TRANSISTOR	
Q801, 802	2SC3311R	TRANSISTOR	
		DIODE(S)	
D1	KV1360NT	DIODE	
D3	KV1583BMTL	DIODE	
D4	KV1360NT	DIODE	
D8	MA165	DIODE	
D10	MA165	DIODE	
D11	RVD1SS135TA	DIODE	
D301	MA110TX	DIODE	
D302	MA8047MTX	DIODE	
D609	RVDMTZ10BTA	DIODE	⚠
D610	RVDMTZ8R2BTA	DIODE	⚠
D616, 617	MA165	DIODE	
D619-621	MA165	DIODE	
D623, 624	MA165	DIODE	
D627	RB441QT77	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D629	MA165	DIODE	
D650	RVDMTZ10BTA	DIODE	⚠
D801	MA165	DIODE	
D802	MA4051MTA	DIODE	
D901-904	RL203M11	DIODE	⚠
D951	RVD1SS133TA	DIODE	
D971	RVD1SS133TA	DIODE	
D1001	RVDMTZ6R8BTA	DIODE	
D1003	LNJ170WHFDA	LED	
D1101	BU1236	LED	
		IC PROTECTOR	
ICP601	SRUN15	IC PROTECTOR	⚠
		VARIABLE RESISTOR(S)	
VR301	RRN6B05B14TA	V. R, TAPE SPEED (HIGH)	DECK2
VR302	RRN6B05B24TA	V. R, TAPE SPEED (NORMAL)	DECK2
VR303	RRN6B05B73TA	V. R, TAPE SPEED (NORMAL)	DECK1
		COMPONENT COMBINATION(S)	
Z1	RXABPWB6A	COMPONENT COMBINATION	
Z301-303	EXBF6L306SYV	COMPONENT COMBINATION	
Z1001	RCDGP1U58XD	REMOTE SENSOR	
BZ401	RAT0014	TWEETER	
BZ501	RAT0014	TWEETER	
BZ801	RAT0014	BUZZER	
		COIL(S)	
L1	RL02B011-T	COIL	
L2	RL01B004-T	COIL	
L3	RLV6C012-0	COIL	
L4	ELEXT101KA9	COIL	
L5	RLQZP8R2JT-Y	COIL	
L8	ELEXT101KA9	COIL	
L301	RL08B003M-K	COIL	
L302-304	RLQB470KTA-Y	COIL	
L401	RLL500050T-Y	COIL	
L501	RLL500050T-Y	COIL	
L602	RLQB221JTA-Y	COIL	
L603	RLL500050T-Y	COIL	
L605-609	RLL500050T-Y	COIL	
L610	RLQB470KTA-Y	COIL	
L614	RLQB470KTA-Y	COIL	
L615	RLL500050T-Y	COIL	
L801-803	ELEXT2R2KA9	COIL	
L807	RLL500050T-Y	COIL	
L901, 902	RLL500050T-Y	COIL	⚠
L1301	RLQB470KTA-Y	COIL	

Ref. No.	Part No.	Part Name & Description	Remarks
		TRANSFORMER(S)	
T1	RLI2Z014-T	AM IFT	
T901	RTP1U1B001AX	POWER TRANSFORMER	⚠
		FILTER(S)	
CF1, 2	RLFFETMLA02D	CERAMIC FILTER	
CF3	RLFDFT12DD	CERAMIC FILTER	
		OSCILLATOR(S)	
X1	RSXZ456KM01	OSCILLATOR(456KHz)	
X2	RSXC7M20S04T	OSCILLATOR(7.2MHz)	
X701	RSXZ16M9M02T	OSCILLATOR(16.9344MHz)	
X801	RSXZ6M00M01T	OSCILLATOR(6MHz)	
X802	RSXD32K7S03	OSCILLATOR(32.7KHz)	
		FUSE(S)	
F901	XBA2C20TBOU	FUSE 250V 2.0A	⚠
		SWITCH(ES)	
S701	RSM0006-P	SW, REST	
S790	RSH1A005	SW, CLOSE	
S791	RSH1A005	SW, OPEN	
S801	EVQ21405R	SW, CLOCK CHECK/ADJUST	
S802	EVQ21405R	SW, TIMER CHECK/ADJUST	
S803	EVQ21405R	SW, TIMER PLAY/REC	
S804	EVQ21405R	SW, MEMORY/AUTO PRESET	
S805	EVQ21405R	SW, TIMER SET/TUNING/CD -	
S806	EVQ21405R	SW, TIMER SET/TUNING CD +	
S807	EVQ21405R	SW, EASY CD REC	
S808	EVQ21405R	SW, TAPE EDIT	
S809	EVQ21405R	SW, REC/REC PAUSE	
S810	EVQ21405R	SW, DECK 1/2	
S811	EVQ21405R	SW, FF TPS	
S812	EVQ21405R	SW, REW TPS	
S813	EVQ21405R	SW, CD SEARCH	
S814	EVQ21405R	SW, CD SEARCH	
S901	RJJ1SE01-H	SW, AC/DC(JK901)	⚠
S951	RSH1A89ZD-U	SW, MODE(DECK1)	
S952	RSH1A90YD-U	SW, HALF(DECK1)	
S953	RSH1A90YD-U	SW, ATS/CrO2(DECK1)	
S971	RSH1A89ZD-U	SW, MODE(DECK2)	
S972	RSH1A90YD-U	SW, HALF(DECK2)	
S973	RSH1A90YD-U	SW, R. REC INH. (DECK2)	
S974	RSH1A90YD-U	SW, F. REC INH. (DECK2)	
S975	RSH1A90YD-U	SW, ATS/CrO2(DECK2)	
S1001	EVQ21405R	SW, CD EJECT	

Ref. No.	Part No.	Part Name & Description	Remarks
S1002	EVQ21405R	SW, COBRA TOP PANEL CLOSE	
S1003	EVQ21405R	SW, COBRA TOP PANEL OPEN	
S1004	EVQ21405R	SW, POWER, AC/ON	
S1005	EVQ21405R	SW, VOLUME -	
S1006	EVQ21405R	SW, VOLUME +	
S1007	EVQ21405R	SW, TAPE/PLAY	
S1008	EVQ21405R	SW, TAPE/STOP	
S1009	EVQ21405R	SW, TUNER/BAND	
S1010	EVQ21405R	SW, CD/STOP, CLEAR	
S1011	EVQ21405R	SW, CD/PLAY/PAUSE	
S1012	EVQ21405R	SW, PRESET EQ	
S1013	EVQ21405R	SW, SURROUND	
S1014	EVQ21405R	SW, AUX	
		CONNECTOR(S)	
CP301	RJP5G18ZA	CONNECTOR(5P)	
CP302	SJTD413	CONNECTOR(4P)	
CP303	RJT028W010-2	CONNECTOR(10P)	
CP304	RJT028W009-2	CONNECTOR(9P)	
CP601	RJT060B04	CONNECTOR(4P)	
CP790	RJP6G17ZA	SOCKET(6P)	
CN701	RJU035T016-1	SOCKET(16P)	
CN702	RJS1A6723-1Q	SOCKET(23P)	
CP901	RJT029W003-1	CONNECTOR(3P)	
CP902	RJT029W004	CONNECTOR(4P)	
CP3031	RJT057W010-1	CONNECTOR(10P)	
CP3041	RJT057W008-1	CONNECTOR(8P)	
CS1	RJT028W011-2	CONNECTOR(11P)	
CS11	RJT057W012-1	CONNECTOR(12P)	
CS12	RJU057W012	SOCKET(12P)	
CS13	RJU028W011-1	SOCKET(11P)	
CS303	RJU028W010	SOCKET(10P)	
CS304	RJU028W009-1	SOCKET(9P)	
CS702	RJS1A6723-Q	SOCKET(23P)	
CS801	RJS1A6840	SOCKET(40P)	
CS1301	RJP4G17ZA	SOCKET(4P)	
CS3031	RJU057W010	SOCKET(10P)	
CS3041	RJU057W008	SOCKET(8P)	
CS8011	RJS1A6840	SOCKET(40P)	
		VARIABLE CAPACITOR(S)	
CT1	RCV10AF1T-S	TRIMMER CAPACITOR	
CT2	ECRLA030E53R	TRIMMER CAPACITOR	
		FUSE HOLDER(S)	
FH901, 902	EYF52BC	FUSE HOLDER	
		DISPLAY	

Ref. No.	Part No.	Part Name & Description	Remarks
LCD801	RSL5127-L	LCD	
		JACK(S)	
JK601	RJJ1D25ZA-C	MIX MIC	
JK602	RJJ33T01	AUX IN	
JK603	RJJ37TK01-C	HEADPHONES	
JK901	RJJ1SE01-H	AC IN(S901)	⚠
		TEST POINT	
TP1	RJP3G1ZA	TEST POINT	

Notes : * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
* Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R1	ERDS2TJ104	1/4W 100K
R2	ERDS2TJ332	1/4W 3.3K
R3	ERDS2TJ104	1/4W 100K
R5	ERDS2TJ103	1/4W 10K
R6	ERDS2TJ152	1/4W 1.5K
R7	ERDS2TJ330	1/4W 33
R8	ERDS2TJ104	1/4W 100K
R9	ERDS2TJ471	1/4W 470
R10	ERDS2TJ102	1/4W 1K
R11	ERDS2TJ103	1/4W 10K
R12	ERDS2TJ223	1/4W 22K
R13	ERDS2TJ153	1/4W 15K
R14	ERDS2TJ103	1/4W 10K
R15	ERDS2TJ223	1/4W 22K
R17	ERDS2TJ103	1/4W 10K
R18	ERDS2TJ223	1/4W 22K
R19	ERDS2TJ101	1/4W 100
R20	ERDS2TJ151	1/4W 150
R22	ERDS2TJ331	1/4W 330
R24	ERDS2TJ471	1/4W 470
R25	ERDS2TJ104	1/4W 100K
R26, 27	ERDS2TJ102	1/4W 1K
R28	ERDS2TJ334	1/4W 330K
R29	ERDS2TJ331	1/4W 330
R30	ERDS2TJ822	1/4W 8.2K
R31	ERDS2TJ472	1/4W 4.7K
R36, 37	ERDS2TJ223	1/4W 22K
R40	ERDS2TJ105T	1/4W 1M
R41	ERDS2TJ301T	1/4W 300
R42	ERDS2TJ103	1/4W 10K
R43, 44	ERDS2TJ222	1/4W 2.2K
R47	ERDS2TJ332	1/4W 3.3K
R49	ERDS2TJ103	1/4W 10K
R52	ERDS2TJ223	1/4W 22K
R54	ERDS2TJ222	1/4W 2.2K
R55, 56	ERDS2TJ223	1/4W 22K
R57	ERDS2TJ103	1/4W 10K
R59	ERDS2TJ471	1/4W 470
R61	ERDS2TJ103	1/4W 10K
R62	ERDS2TJ471	1/4W 470
R63	ERDS2TJ105T	1/4W 1M
R64	ERDS2TJ332	1/4W 3.3K
R65	ERDS2TJ470	1/4W 47
R66	ERDS2TJ332	1/4W 3.3K
R101	ERJ6GEYJ101V	1/10W 100
R103	ERJ6GEYJ682V	1/10W 6.8K
R104	ERJ6GEYJ104V	1/10W 100K
R105	ERJ6GEYJ182V	1/10W 1.8K
R106	ERJ6GEYJ332V	1/10W 3.3K
R108	ERJ6GEYJ272V	1/10W 2.7K
R109	ERJ6GEYJ392V	1/10W 3.9K
R110	ERJ6GEYJ822V	1/10W 8.2K
R111	ERJ6GEYJ104V	1/10W 100K
R201	ERJ6GEYJ101V	1/10W 100
R203	ERJ6GEYJ682V	1/10W 6.8K
R204	ERJ6GEYJ104V	1/10W 100K
R205	ERJ6GEYJ182V	1/10W 1.8K
R206	ERJ6GEYJ332V	1/10W 3.3K
R208	ERJ6GEYJ272V	1/10W 2.7K
R209	ERJ6GEYJ392V	1/10W 3.9K
R210	ERJ6GEYJ822V	1/10W 8.2K
R211	ERJ6GEYJ104V	1/10W 100K
R301	ERJ6GEYJ103V	1/10W 10K
R302-304	ERJ6GEYJ102V	1/10W 1K
R305	ERJ6GEYJ472V	1/10W 4.7K
R306	ERJ6GEYJ103V	1/10W 10K
R307	ERJ6GEYJ223V	1/10W 22K
R308 ⚠	ERD2FCVJ4R7T	1/4W 4.7
R309	ERJ6GEYJ472V	1/10W 4.7K
R310	ERJ6GEYJ332V	1/10W 3.3K
R311	ERJ6GEYJ472V	1/10W 4.7K
R312	ERJ6GEYJ334V	1/10W 330K
R313	ERJ6GEYJ123V	1/10W 12K
R314	ERJ6GEYJ222V	1/10W 2.2K
R315	ERJ6GEYJ102V	1/10W 1K
R316	ERJ6GEYJ103V	1/10W 10K
R317	ERJ6GEYJ330V	1/10W 33
R318	ERJ6GEYJ335V	1/10W 3.3M
R319-322	ERJ6GEYJ104V	1/10W 100K
R323, 324	ERJ6GEYJ273V	1/10W 27K
R325	ERJ6GEYJ104V	1/10W 100K
R326	ERJ6GEYJ153V	1/10W 15K
R327	ERJ8GEYJ222V	1/8W 2.2K
R328	ERJ8GEYJ103V	1/8W 10K
R329	ERJ6GEYJ334V	1/10W 330K
R330	ERJ6GEYJ332V	1/10W 3.3K
R331	ERJ8GEYJ332V	1/8W 3.3K
R332	ERJ8GEYJ104V	1/8W 100K
R333	ERJ6GEYJ472V	1/10W 4.7K
R334, 335	ERJ6GEYJ103V	1/10W 10K
R336	ERJ8GEYJ221V	1/8W 220
R338	ERJ6GEYJ153V	1/10W 15K
R339	ERJ6GEYJ392V	1/10W 3.9K
R340	ERJ6GEYJ183V	1/10W 18K
R341	ERJ6GEYJ334V	1/10W 330K
R342	ERJ8GEYJ221V	1/8W 220
R343	ERJ6GEYJ103V	1/10W 10K
R344	ERJ6GEYJ123V	1/10W 12K
R346	ERJ6GEYJ272V	1/10W 2.7K
R347	ERJ6GEYJ334V	1/10W 330K
R348	ERJ6GEYJ123V	1/10W 12K
R349	ERJ6GEYJ104V	1/10W 100K
R350	ERJ6GEYJ334V	1/10W 330K
R351, 352	ERJ6GEYJ103V	1/10W 10K
R353, 354	ERJ6GEYJ104V	1/10W 100K
R355, 356	ERJ6GEYJ103V	1/10W 10K
R366	ERJ6GEYJ123V	1/10W 12K
R367	ERJ6GEYJ100	1/10W 10
R368	ERJ6GEYJ330V	1/10W 33
R369	ERJ6GEYJ334V	1/10W 330K
R401	ERDS2TJ124	1/4W 120K
R402	ERDS2TJ103	1/4W 10K
R404	ERDS2TJ104T	1/4W 100K
R405	ERDS2TJ103	1/4W 10K
R406	ERDS2TJ823T	1/4W 82K
R409	ERDS2TJ824	1/4W 820K
R410	ERDS2TJ562	1/4W 5.6K
R411	ERDS2TJ471	1/4W 470
R414	ERDS2TJ153	1/4W 15K
R415	ERDS2TJ103	1/4W 10K
R416	ERDS2TJ392T	1/4W 3.9K
R417	ERDS2TJ102	1/4W 1K
R418	ERDS2TJ683	1/4W 68K
R419	ERDS2TJ1R2	1/4W 1.2
R420	ERDS2TJ1R0	1/4W 1.0
R421	ERDS2TJ181T	1/4W 180
R422	ERDS2TJ152	1/4W 1.5K
R423	ERDS2TJ222	1/4W 2.2K
R501	ERDS2TJ124	1/4W 120K
R502	ERDS2TJ103	1/4W 10K
R504	ERDS2TJ104T	1/4W 100K
R505	ERDS2TJ103	1/4W 10K
R506	ERDS2TJ823T	1/4W 82K
R509	ERDS2TJ824	1/4W 820K
R510	ERDS2TJ562	1/4W 5.6K
R511	ERDS2TJ471	1/4W 470
R514	ERDS2TJ153	1/4W 15K
R515	ERDS2TJ103	1/4W 10K
R516	ERDS2TJ392T	1/4W 3.9K
R517	ERDS2TJ102	1/4W 1K
R518	ERDS2TJ683	1/4W 68K
R519	ERDS2TJ1R2	1/4W 1.2
R520	ERDS2TJ1R0	1/4W 1.0
R521	ERDS2TJ181T	1/4W 180

Ref. No.	Part No.	Values & Remarks
R522	ERDS2TJ152	1/4W 1.5K
R523	ERDS2TJ222	1/4W 2.2K
R601	ERDS2TJ101	1/4W 100
R602	ERDS2TJ472	1/4W 4.7K
R603	ERDS2TJ222	1/4W 2.2K
R604	ERDS2TJ105T	1/4W 1M
R607	ERDS2TJ221	1/4W 220
R609	ERDS2TJ101	1/4W 100
R616	ERDS2TJ103	1/4W 10K
R617 ⚠	ERD2FCVG680T	1/4W 68
R620	ERDS2TJ101	1/4W 100
R621	ERDS2TJ103	1/4W 10K
R623	ERDS2TJ222	1/4W 2.2K
R625	ERDS2TJ563	1/4W 56K
R626	ERDS2TJ474	1/4W 470K
R627	ERDS2TJ473	1/4W 47K
R628	ERDS2TJ221	1/4W 220
R630	ERDS2TJ1R5T	1/4W 1.5
R631	ERDS2TJ103	1/4W 10K
R632	ERDS2TJ472	1/4W 4.7K
R633	ERDS2TJ333	1/4W 33K
R634	ERDS2TJ223	1/4W 22K
R635	ERDS2TJ122	1/4W 1.2K
R636	ERDS2TJ472	1/4W 4.7K
R637	ERDS2TJ331	1/4W 330
R638	ERDS2TJ472	1/4W 4.7K
R639	ERDS2TJ222	1/4W 2.2K
R640	ERDS2TJ472	1/4W 4.7K
R641	ERG1SJ470E	1W 47
R642-644	ERDS2TJ102	1/4W 1K
R645-647	ERDS2TJ334	1/4W 330K
R649, 650	ERDS2TJ103	1/4W 10K
R660	ERDS2TJ103	1/4W 10K
R663	ERDS2TJ472	1/4W 4.7K
R664	ERDS2TJ561	1/4W 560
R665	ERDS2TJ822	1/4W 8.2K
R666, 667	ERDS2TJ472	1/4W 4.7K
R668	ERDS2TJ102	1/4W 1K
R669	ERDS2TJ153	1/4W 15K
R675	ERDS2TJ1R5T	1/4W 1.5
R676	ERDS2TJ101	1/4W 100
R678	ERDS2TJ223	1/4W 22K
R679	ERDS2TJ562	1/4W 5.6K
R680	ERDS2TJ182	1/4W 1.8K
R681	ERDS2TJ102	1/4W 1K
R701	ERJ6GEYJ100	1/10W 10
R702	ERJ6GEYJ471V	1/10W 470
R703	ERJ6GEYJ823	1/10W 82K
R704	ERJ6GEYJ102A	1/10W 1K
R705	ERJ6GEYJ103V	1/10W 10K
R706	ERJ6GEYJ102A	1/10W 1K
R707	ERJ6GEYJ473V	1/10W 47K

Ref. No.	Part No.	Values & Remarks
R708	ERJ6GEYJ104V	1/10W 100K
R709	ERJ6GEYJ683V	1/10W 68K
R711	ERJ6GEYJ154V	1/10W 150K
R712	ERJ6GEYJ221V	1/10W 220
R714	ERJ6GEY0R00A	1/10W 0.00
R717-720	ERJ6GEYJ102A	1/10W 1K
R721	ERJ6GEYJ101V	1/10W 100
R722	ERJ6GEYJ563V	1/10W 56K
R723	ERJ6GEYJ182V	1/10W 1.8K
R724	ERJ6GEYJ333V	1/10W 33K
R725	ERJ6GEYJ472V	1/10W 4.7K
R726	ERJ6GEYJ473V	1/10W 47K
R727	ERJ6GEYJ103V	1/10W 10K
R728	ERJ6GEYJ392V	1/10W 3.9K
R730	ERJ6GEYJ331V	1/10W 330
R731	ERJ6GEYJ392V	1/10W 3.9K
R734-736	ERJ6GEYJ101V	1/10W 100
R738	ERJ6GEYJ223V	1/10W 22K
R739	ERJ6GEYJ681V	1/10W 680
R741-743	ERJ6GEYJ562V	1/10W 5.6K
R744	ERJ6GEYJ103V	1/10W 10K
R745	ERJ6GEYJ155V	1/10W 1.5M
R748	ERJ6GEYJ182V	1/10W 1.8K
R749	ERJ8GEYJ103V	1/8W 10K
R801, 802	ERDS2TJ332	1/4W 3.3K
R803	ERDS2TJ103	1/4W 10K
R804	ERDS2TJ563	1/4W 56K
R805	ERDS2TJ623T	1/4W 62K
R806	ERDS2TJ563	1/4W 56K
R808	ERDS2TJ105T	1/4W 1M
R809	ERDS2TJ106T	1/4W 10M
R810	ERDS2TJ334	1/4W 330K
R815-817	ERDS2TJ472	1/4W 4.7K
R819-822	ERDS2TJ472	1/4W 4.7K
R823, 824	ERDS2TJ103	1/4W 10K
R825-827	ERDS2TJ472	1/4W 4.7K
R828-830	ERDS2TJ103	1/4W 10K
R831	ERDS2TJ472	1/4W 4.7K
R832	ERDS2TJ124T	1/4W 120K
R833	ERDS2TJ104	1/4W 100K
R834	ERDS2TJ222	1/4W 2.2K
R835-837	ERDS2TJ102	1/4W 1K
R838-841	ERDS2TJ104	1/4W 100K
R844	ERDS2TJ103	1/4W 10K
R845	ERDS2TJ104	1/4W 100K
R846-849	ERDS2TJ102	1/4W 1K
R851	ERDS2TJ102	1/4W 1K
R852	ERDS2TJ122	1/4W 1.2K
R853	ERDS2TJ152	1/4W 1.5K
R855	ERDS2TJ102	1/4W 1K
R856	ERDS2TJ182	1/4W 1.8K
R857	ERDS2TJ122	1/4W 1.2K

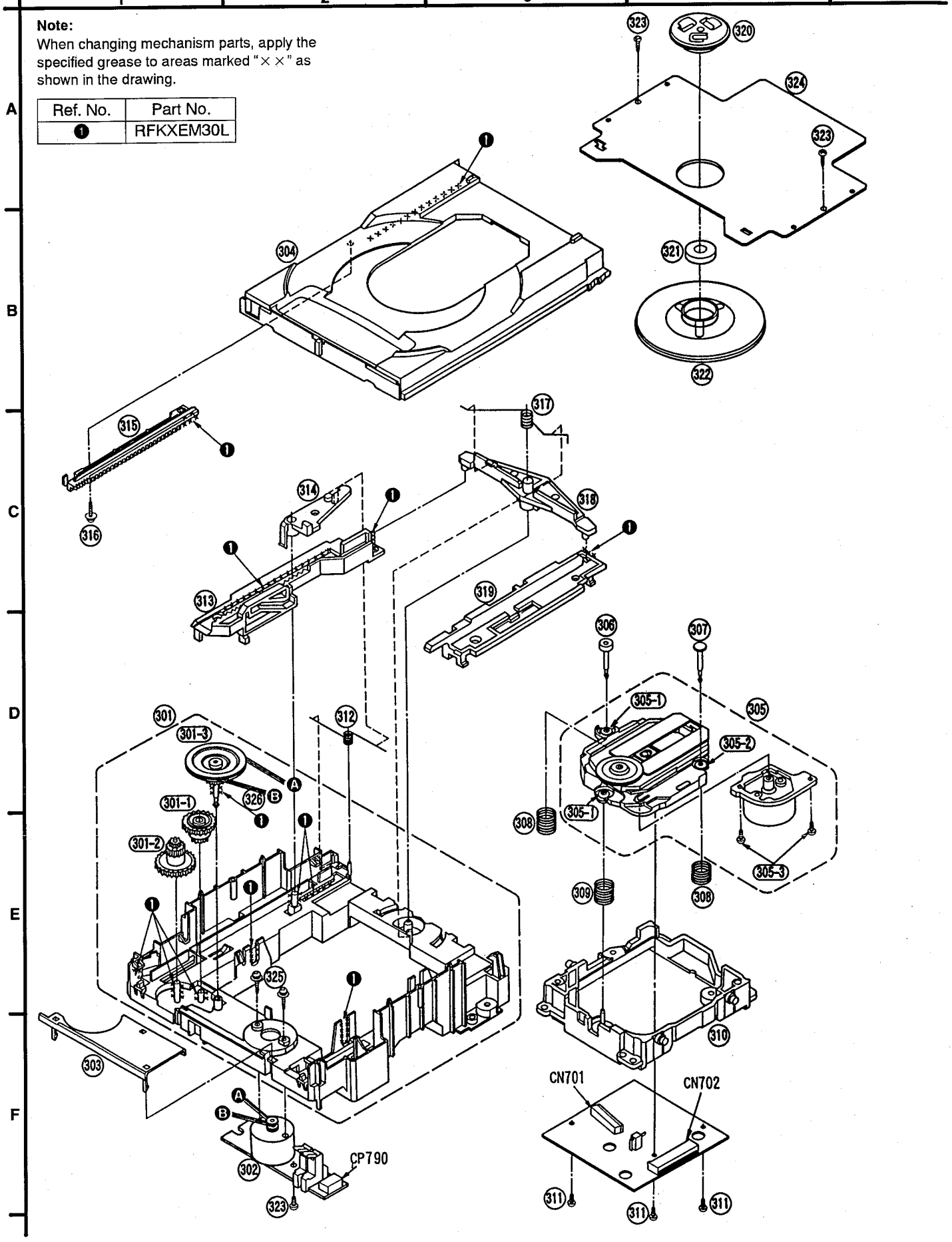
Ref. No.	Part No.	Values & Remarks
R858	ERDS2TJ152	1/4W 1.5K
R859	ERDS2TJ182	1/4W 1.8K
R860	ERDS2TJ392T	1/4W 3.9K
R861	ERDS2TJ562	1/4W 5.6K
R862	ERDS2TJ103	1/4W 10K
R863	ERDS2TJ183T	1/4W 18K
R864	ERDS2TJ104	1/4W 100K
R865	ERDS2TJ474	1/4W 470K
R866	ERDS2TJ334	1/4W 330K
R1001	ERDS2TJ272T	1/4W 2.7K
R1002	ERDS2TJ392T	1/4W 3.9K
R1003	ERDS2TJ562	1/4W 5.6K
R1004	ERDS2TJ103	1/4W 10K
R1005	ERDS2TJ183T	1/4W 18K
R1007	ERDS2TJ102	1/4W 1K
R1008	ERDS2TJ122	1/4W 1.2K
R1009	ERDS2TJ152	1/4W 1.5K
R1010	ERDS2TJ182	1/4W 1.8K
R1011	ERDS2TJ272T	1/4W 2.7K
R1012	ERDS2TJ392T	1/4W 3.9K
R1013	ERDS2TJ562	1/4W 5.6K
R1016	ERDS2TJ181T	1/4W 180
R1018	ERDS2TG103T	1/4W 10K
R1019, 1020	ERDS2TJ223	1/4W 22K
R1022	ERDS2TJ272T	1/4W 2.7K
R1101	ERDS2TJ221	1/4W 220
		CHIP JUMPER
RJ701-704	ERJ8GEY0R00A	1/8W 0.00
RJ707-709	ERJ8GEY0R00A	1/8W 0.00
RJ714-717	ERJ8GEY0R00A	1/8W 0.00
RJ721	ERJ6GEY0R00A	1/10W 0.00
RJ724-726	ERJ6GEY0R00A	1/10W 0.00
		TEST JUMPER
TJ701, 702	EYF8CU	
		CAPACITORS
C4	RCBS1H102KBY	50V 1000P
C5	ECBT1H2R2KC5	50V 2.2P
C6	RCBS1H102KBY	50V 1000P
C9	ECEA1HKN010B	50V 1U
C10	ECBT1C332MR5	16V 3300P
C11	ECEA1AKA101B	10V 100U
C12	ECFR1C473MR	16V 0.047U
C13	ECFR1C103MR	16V 0.01U
C14	ECBT1C103MS5	16V 0.01U
C15	ECBT1H6R8KC5	50V 6.8P
C16, 17	RCBS1H102KBY	50V 1000P

Ref. No.	Part No.	Part Name & Description	Remarks
		LOADING UNIT	
301	RFKJXDT07-K	CHASSIS ASS'Y	
301-1	RDG0142	GEAR	
301-2	RDG0193	GEAR	
301-3	RDP0065	PULLY	
302	REM0019	MOTOR	
303	RMK0255	BELT COVER	
304	RGQ0143-K	TRAY	
305	RAE0113Z	TRAVERSE DECK	
305-1	SHGD113-1	RUBBER(A)	
305-2	SHGD112	RUBBER(B)	
305-3	SNSD38	SCREW	
306	RMS0350	PIN(B)	
307	RMS0123-1	PIN(A)	
308	RME0109	SPRING	
309	RME0142	SPRING	
310	RMR0698-K	TRAVERSE SHASSIS	
311	XTV2+6G	SCREW	
312	RME0063	SPRING	
313	RMM0079-1	SLIDE PLATE(A)	
314	RML0178-1	LEVER	
315	RFKNLPG440-K	GEAR ASS'Y(B)	
316	RHD20009-1	SCREW	
317	RME0087	SPRING	
318	RML0349	LEVER	
319	RMM0059-1	SLIDE PLATE(B)	
320	RMR0334	CLUMPER	
321	RHM245ZA	MAGNET	
322	RXQ0380	MAGNET HOLDER	
323	XTN26+6G	SCREW	
324	RMA0793	CLUMP PLATE	
325	XYN2+F6FZ	SCREW	
326	RMG0158	BELT	

■ Loading Unit Parts Location

Note:
When changing mechanism parts, apply the specified grease to areas marked "× ×" as shown in the drawing.

Ref. No.	Part No.
❶	RFKXEM30L



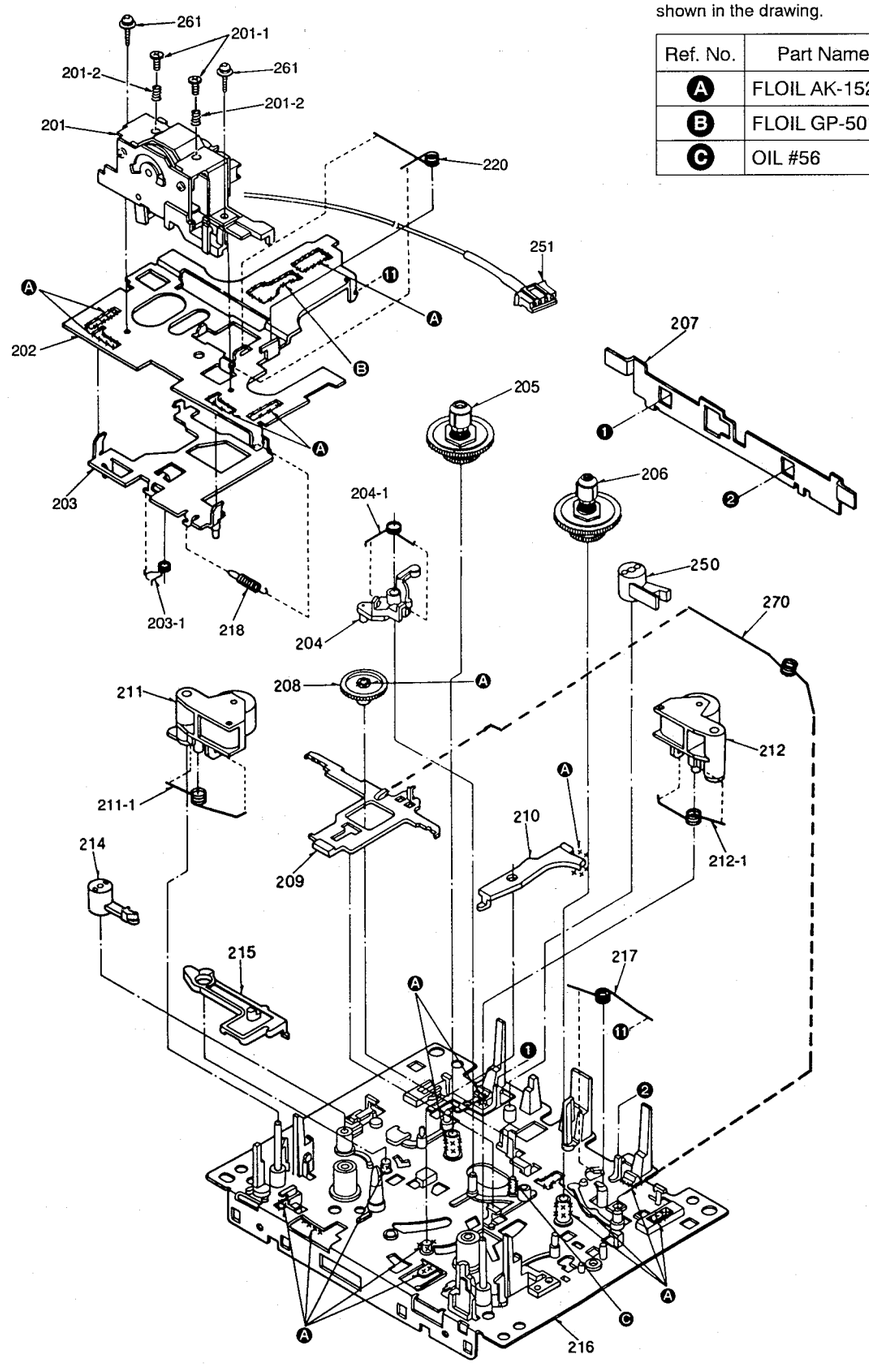
Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS	
201	RXQ0383	HEAD ASS'Y(P.B)	DECK1
201	RXQ0384	HEAD ASS'Y(R/P)	DECK2
201-1	RHE5152ZB	SCREW	
201-2	RMB0331	SPRING	
202	RUA793ZF	CHASSIS	
203	RZLAR300	LEVER ASS'Y	
203-1	RUW143ZA	SPRING	
204	1UB0089ZA	LEVER ASS'Y	
204-1	RUW148ZA	SPRING	
205	1DM0018ZB	REEL TABLE ASS'Y	
206	1DM0017ZB	REEL TABLE ASS'Y	
207	RML0069-1	LEVER	
208	RDG5772ZC	GEAR	
209	RUB508ZB	LEVER	
210	RUB506ZB	LEVER	
211	1UB0088ZB	PINCH ROLLER ASS'Y	
211-1	RMB0310	SPRING	
212	1UB0087ZB	PINCH ROLLER ASS'Y	
212-1	RUW140ZC	SPRING	
214	RNL1ZD	ARM	
215	RUB503ZD	LEVER	
216	RFKRRSCH9N	CHASSIS ASS'Y	
217	RUW142ZA	SPRING	
218	RUD105ZA	SPRING	
220	RUW139ZA	SPRING	
221	REM0036-1	MOTOR ASS'Y	
222	1UE0015ZA	PLUNGER ASS'Y	
223	RUB428ZE	SHAFT	
224	RUL1030YB	PLATE	
225	RMD5014ZC	SPACER	
226	RDG5927ZG	GEAR	
227	RFKRXDS35-K	FLYWHEEL ASS'Y	
227-1	RNW139ZA	WASHER	
228	1DW0038ZB	FLYWHEEL ASS'Y	
228-1	RNW138ZA	WASHER	
229	1DG0006ZB	GEAR ASS'Y	
230	RUB513ZD	LEVER	
231	1UB0091ZA	LEVER ASS'Y	
231-1	RUW146ZA	SPRING	
232	1DR0011ZB	PULLEY ASS'Y	
233	RDV90ZB	BELT	
234	RDG5769ZA	GEAR	
235	RUQ111ZB	SPRING	
236	RUW145ZA	SPRING	
237	1UB0090ZA	ROD ASS'Y	
237-1	RUB512ZB	ROD	
238	RDG5773ZB	GEAR	
239	RUQ112ZA	SPRING	
240	RUS609ZC	SPRING	

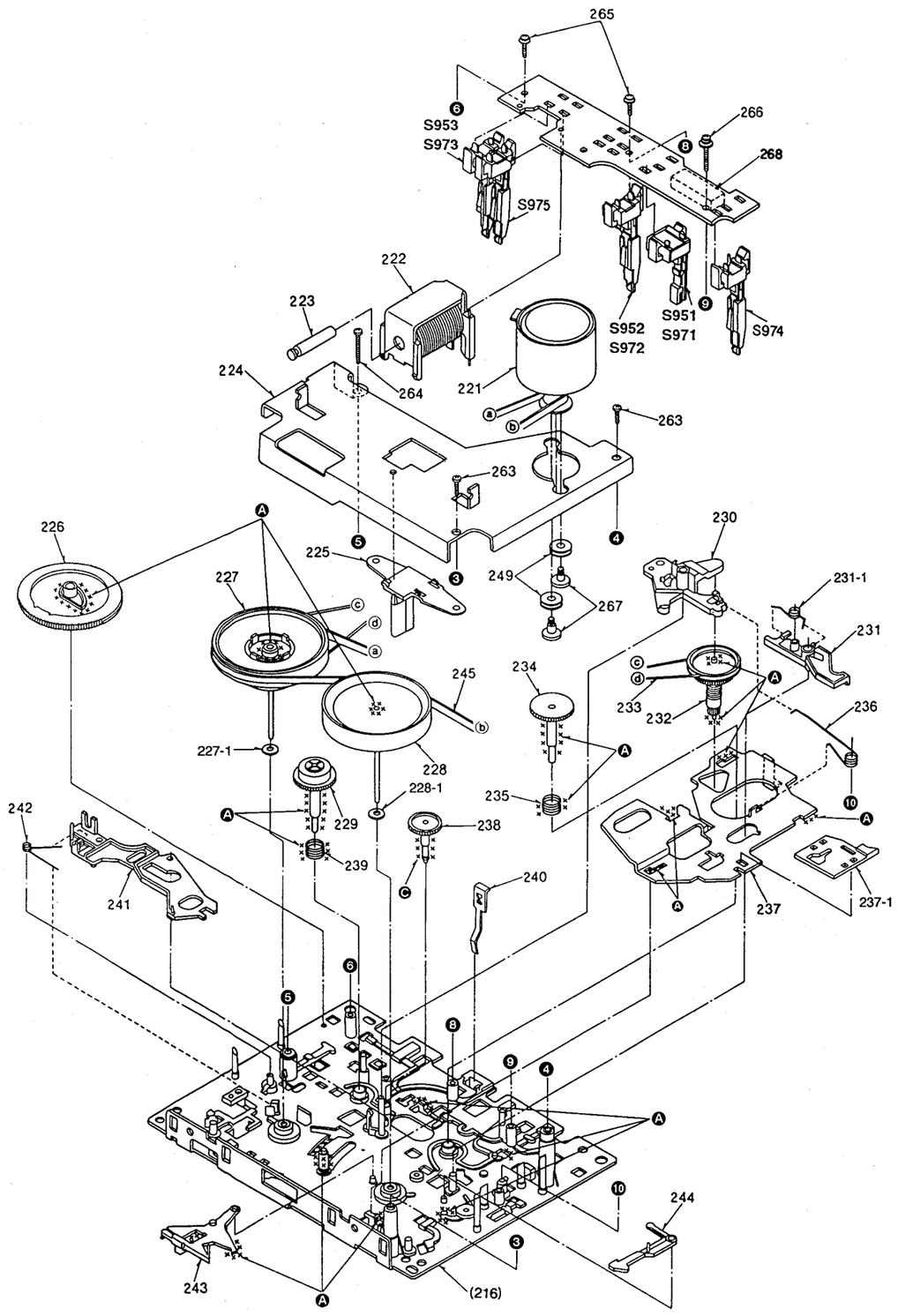
Ref. No.	Part No.	Part Name & Description	Remarks
241	RUB514ZC	LEVER	
242	RUW147ZA	SPRING	
243	RUB515ZA	LEVER	
244	RUB509ZA	LEVER	
245	RDV108ZA	BELT	
249	RMG0102-1	RUBBER	
250	RNL180ZB	LEVER	
251	REX0308	WIRE ASS'Y	DECK1
251	REX0294-1	WIRE ASS'Y	DECK2
261	XTW2+6L	SCREW	
263	XTN26+7J	SCREW	
264	RHE5203ZA	SCREW	
265	XTW2+8S	SCREW	
266	XYC2+JF16	SCREW	
267	RHD26002	SCREW	
268	RJS7T7ZA	CONNECTOR(J951)	DECK1
268	RJS10T7ZA	CONNECTOR(J971)	DECK2
270	RUW144ZA	SPRING	

■ Mechanism Parts Location • DECK 1 (PLAYBACK), DECK 2 (RECORD/PLAYBACK)

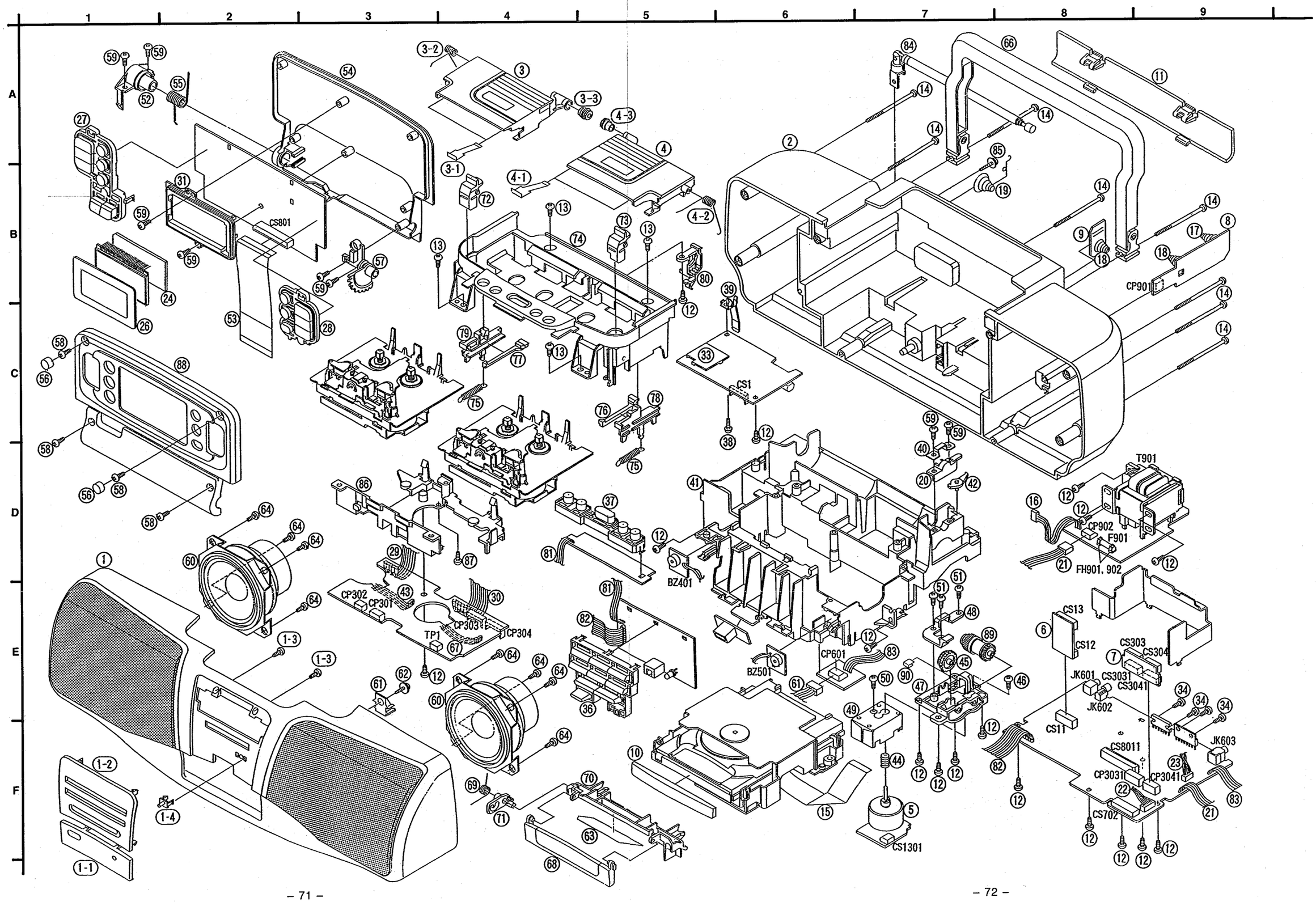
Note:
When changing mechanism parts, apply the specified grease to areas marked "× ×" as shown in the drawing.

Ref. No.	Part Name	Part No.
Ⓐ	FLOIL AK-152	SZZ0L18
Ⓑ	FLOIL GP-501A	RZZ0L09
Ⓒ	OIL #56	RZZ0L02





■ Cabinet Parts Location



Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RYK0498A-K	FRONT CABINET ASS'Y	
1-1	RFKGXDT07EGA	PANEL(SENSOR)	
1-2	RFKGXDT07EGB	PANEL(SPATIALIZER)	
1-3	XTV26+8G	SCREW	
1-4	RGL0260-Q	LEADING LIGHT PANEL	
2	RKS0180A-K	REAR CABINET ASS'Y	(EG)
2	RKS0180B-K	REAR CABINET ASS'Y	(EB)
3	RYF0296-K	CASSETTE HOLDER(DECK1)	
3-1	RUS757ZA	SPRING	
3-2	RME0158	SPRING	
3-3	RDG0183	GEAR	
4	RYF0295-K	CASSETTE HOLDER(DECK2)	
4-1	RUS757ZA	SPRING	
4-2	RME0159	SPRING	
4-3	RDG0183	GEAR	
5	RFKPXDT07-K	MOTOR ASS'Y	
6	RFKBXDT07EGA	RELAY P.C.B. (TUNER)	
7	RFKBXDT07EGB	RELAY P.C.B. (MECHA)	
8	RFKBXDT07EGC	BATTERY P.C.B. (MAIN)	
9	RFKBXDT07EGD	BATTERY P.C.B. (BACK-UP)	
10	RGK0656-K	ORNAMENT	
11	RKK0010A-K	BATTERY COVER	
12	XTV3+12G	SCREW	
13	XTV3+12GFZ	SCREW	
14	XTN3+40GY	SCREW	
15	REE0584	FFC(23P)	
16	REX0626	WIRE ASS'Y(W901/3P)	
17	RJC511ZB	BATTERY TERMINAL(MAIN)	
18	RJC751ZA	BATTERY TERMINAL(BACK-UP)	
19	RJC91005	BATTERY TERMINAL(+/-)	
20	RDB0057	HOLDER	
21	REX0625	WIRE ASS'Y(PW902/4P)	
22	REX0627Y	WIRE ASS'Y(CW790/6P)	
23	REX0628Y-1	WIRE ASS'Y(CW301/4P)	
24	RMR0827-K	SPACER	
26	RGP0422-Q	PANEL(LCD)	
27	RGU1126A-K	BUTTON(TAPE OPERATION)	
28	RGU1127A-K	BUTTON(TIMER)	
29	RWJ1107075QQ	FLAT CABLE(PW303/7P)	
30	RWJ1110075QQ	FLAT CABLE(PW304/10P)	
31	RMN0292	HOLDER(LCD)	
33	RSC0326	SHIELD PLATE	
34	XTV3+10F	SCREW	
36	RGU1124A-K	BUTTON(OPERATION)	
37	RGU1125-K	BUTTON(DISPLAY)	
38	RHD30006	SCREW	
39	RJR0125	ANTENNA TERMINAL	
40	RMC0252	SPRING	
41	RMK0258	CHASSIS	

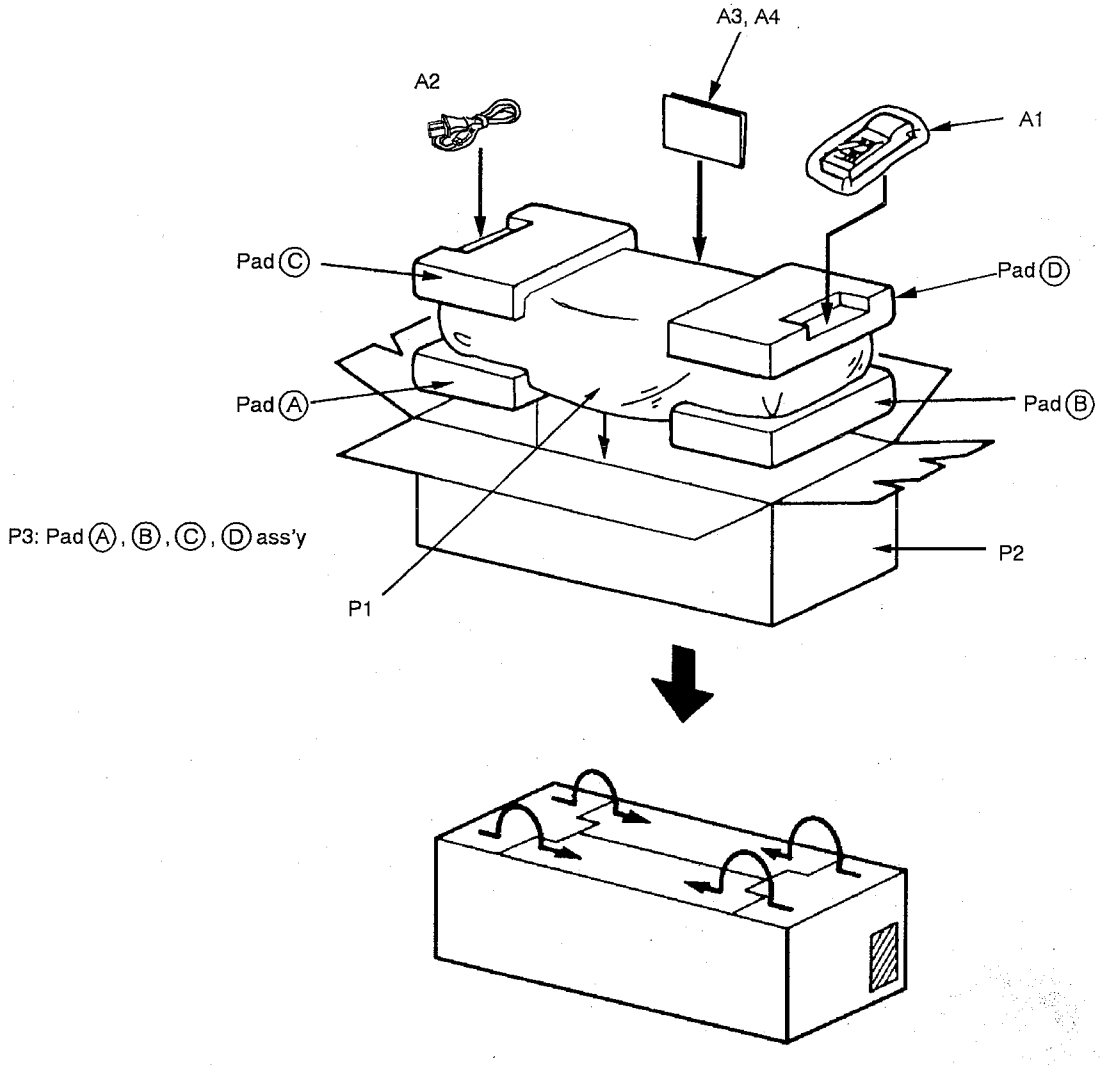
Ref. No.	Part No.	Part Name & Description	Remarks
42	RMR0699-K	STOPPER	
43	RWJ4704110KR	FLAT CABLE(W305/4P)	
44	RDG0250A	GEAR	
45	RDG0289	GEAR	
46	XQN2+C6	SCREW	
47	RMK0261	CHASSIS	
48	RMR0801-W	ANGLE	
49	RSC0387	SHIELD CASE	
50	XQN2+C3	SCREW	
51	XTV26+12F	SCREW	
52	RDB0063-1	HOLDER	
53	REE0583	FFC(40P)	
54	RKF0387-K	COVER(DISPLAY)	
55	RMB0373-1	SPRING	
56	RMG0249-K1	RUBBER	
57	RMS0330	DRIVE GEAR	
58	XTN26+8GFZ	SCREW	
59	XTV26+8G	SCREW	
60	EAS10P497E	SPEAKER	
61	REX0629-1	WIRE ASS'Y	
62	RHD30044	SCREW	
63	RMR0820-W	SHEET	
64	XTV3+10G	SCREW	
66	RYH0016-K1	HANDLE	
67	RWJ4704110KR	FLAT CABLE(W306/4P)	
68	RGP0419-Q	PANEL(CD)	
69	RMB0374	SPRING	
70	RMK0260	BASE(PANEL)	
71	RMM0124	CAM(CD PANEL DRIVE)	
72	RGU1128-K	BUTTON(DECK1 EJECT)	
73	RGU1129-K	BUTTON(DECK2 EJECT)	
74	RKQ0163A-K	TOP CABINET	
75	RMB0375-1	SPRING	
76	RML0236A	LEVER(EJECT 2L)	
77	RML0237A	LEVER(EJECT 2R)	
78	RML0353	LEVER(EJECT 1L)	
79	RML0354	LEVER(EJECT 1R)	
80	RMR0800-W	GEAR HOLDER	
81	RWJ5003080XX	FLAT CABLE(PW601/3P)	
82	RWJ1109185XX	FLAT CABLE(PW602/9P)	
83	RWJ5004200XX	FLAT CABLE(PW604/4P)	
84	XEARR175ED-Y	ROD ANTENNA	
85	XYN3+F12FY	SCREW	
86	RMK0259	CHASSIS	
87	XTV26+10G	SCREW	
88	RFKGXDT07EGC	PANEL ASS'Y(DISPLAY)	
89	RFKNXDT07-K	GEAR ASS'Y	
90	RMC0253	CLIP	

Note: The reference number SA represent the grease and tool used for this unit.

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPH653ZA	PROTECTION COVER	
P2	RPG2242	GIFT BOX	(EG)
P2	RPG2243	GIFT BOX	(EB)
P3	RPN0835	PAD ASS'Y	
		ACCESSORIES	
A1	RAK-RX157WH	REMOTE CONTROLLER	
A1-1	RKK0057-K	BATTERY COVER(REMOTE CONT.)	
A2	RJA0019-2K	AC POWER CORD	⚠(EG)
A2	VJA0733	AC POWER CORD	⚠(EB)<VRD>
A3	RQT2798-G	INSTRUCTIONS MANUAL	(EG)
A3	RQT2797-B	INSTRUCTIONS MANUAL	(EB)
A4	RQT2799-E	INSTRUCTIONS MANUAL	(EG)

Ref. No.	Part No.	Part Name & Description	Remarks
		GREASE OR JIG/TOOL	
SA1	RFKZ0048	EXTENSION CABLE	
SA2	RFKZ0024	EXTENSION CABLE	
SA3	QZZCFM	TEST TAPE(AZIMUTH/FREQ. etc.	
SA4	QZZCWAT	TEST TAPE(TAPE SPEED etc.)	
SA5	QZZCRA	BLANK TAPE(NORMAL POSITION)	
SA6	QZZCRX	BLANK TAPE(CrO2 POSITION)	
SA7	SZZP1054C	TEST DISC(PLAYABILITY)	
SA8	SZZP1056C	TEST DISC(UNEVEN)	
SA9	SZZP1101C	HEXAGONAL WRENCH	
SA10	RZZ0L01	SCREW LOCKING BOND	
SA11	RFKXEM30L	GREASE(CD MECHANISM)	
SA12	SZZ0L18	FLOIL	
SA13	RZZ0L09	FLOIL	
SA14	RZZ0L02	OIL	

■ Packaging



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